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13. ABSTRACT (Maximum 200 words)  
Efficiency, staff satisfaction and, possibly, patient satisfaction increased following implementation 'primary care optimization' (PCO). Support staffing increased 62%, but was still below Air Force goals. Only 33% of 'optimized' providers had a full complement of support staff. Enrollment increased 32% while daily productivity increased 21 to 35% depending on the calculation method utilized. Two areas of staff satisfaction: workload, and compensation, decreased following PCO. Five areas of staff satisfaction: treatment team, patient relationships, facility support, efficiency, and quality, increased following PCO. The number of hours worked per week, nursing support, and the staff position were key variables affecting staff satisfaction. Other important variables included age, gender, and type of employee. Administrative activities were related to lower satisfaction. Efficiency gains have been impressive, but 18% more efficiency will be needed to meet the Surgeon General's goal of an average enrollment of 1500 patients per provider. As primary care optimization matures and the leadership continues to press for more productivity, PCO staff satisfaction may decline because of longer hours and a more hectic work pace. Staff satisfaction and patient satisfaction should be monitored closely to ensure that further increasing productivity does not have an adverse effect on these important factors.

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GRADUATE PROGRAM IN HEALTH CARE ADMINISTRATION

CHANGES IN PATIENT SATISFACTION, STAFF SATISFACTION, AND  
EFFICIENCY FOLLOWING THE IMPLEMENTATION OF THE AIR FORCE  
PRIMARY CARE OPTIMIZATION PROGRAM

A GRADUATE MANAGEMENT PROJECT SUBMITTED TO THE FACULTY OF  
THE U. S. ARMY-BAYLOR UNIVERSITY FOR SUCCESSFUL COMPLETION OF  
REQUIREMENTS FOR THE DEGREE OF MASTER OF HEALTH CARE  
ADMINISTRATION

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SAN ANTONIO, TEXAS

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### Abstract

Efficiency, staff satisfaction and, possibly, patient satisfaction increased following implementation 'primary care optimization' (PCO). Support staffing increased 62%, but was still below Air Force goals. Only 33% of 'optimized' providers had a full complement of support staff. Enrollment increased 32% while daily productivity increased 21 to 35% depending on the calculation method utilized. Two areas of staff satisfaction: workload, and compensation, decreased following PCO. Five areas of staff satisfaction: treatment team, patient relationships, facility support, efficiency, and quality, increased following PCO. The number of hours worked per week, nursing support, and the staff position were key variables affecting staff satisfaction. Other important variables included age, gender, and type of employee. Administrative activities were related to lower satisfaction. Efficiency gains have been impressive, but 18% more efficiency will be needed to meet the Surgeon General's goal of an average enrollment of 1500 patients per provider. As primary care optimization matures and the leadership continues to press for more productivity, PCO staff satisfaction may decline because of longer hours and a more hectic work pace. Staff satisfaction and patient satisfaction should be monitored closely to ensure that further increasing productivity does not have an adverse effect on these important factors.

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## Introduction

### Conditions Which Prompted the Study

The Department of Defense is under increasing pressure to reduce cost and provide more value in its health care delivery. In 1991, TRICARE was established to reduce the cost of medical care that could not be delivered in military health care facilities by contracting with local providers at a discounted rate. Part of the contract required that military treatment facilities (MTFs) continue to operate at a baseline rate of efficiency. Since the implementation of TRICARE, productivity in MTFs decreased while the contract network workload increased. (This resulted in a significant unexpected cost to the military medical system, some of this cost was paid from non-medical military funds which otherwise would have been used for weapon system procurement.)

In order to reduce these expenses, the Air Force, in 1999, launched a major campaign to recapture workload from the contractor. This program entitled "Primary Care Optimization" was later extended to the entire military health system (MHS) (Assistant Secretary of Defense, Health Affairs, 2000). The goal of the program was to transform the patient care process from one that delivered provider centered, episodic care to one of patient centered, team-based, preventive care or population health and to increase efficiency in primary care. The program required MTF commanders to provide more assets in primary care in order to optimize the efficiency of the providers and enroll more beneficiaries into the MTF instead of the network. The Air Force established five key metrics to monitor the number of exam rooms and support staff for each provider and to track enrollment and efficiency (Air Force Medical Service, 2000). The Air Force

Medical Operations Agency (AFMOA) also established a program that trained two primary care teams from each base to maximize efficiencies in primary care. MTF commanders were directed to establish two optimized teams no later than 30 May 00 and two more no later than 31 Oct 00.

#### Statement of the Problem or Question

Primary care optimization was initiated as an effort to reduce the total cost of health care and to transition to population health. As a new program, the results of the effort have not been studied. The Air Force does not know if the optimized teams are truly more efficient, and, if they are, at what cost? What impact has the program had on other aspects of health care? Patient and staff satisfaction may have been affected by the effort to improve efficiency. Has staff satisfaction changed with the advent of primary care optimization? Are the patients who receive care more or less satisfied with their care following PCO?

#### Literature Review

##### Ambulatory Care Clinic Efficiency

Efficiency is a relatively new concept in health care. Physicians have traditionally concerned themselves with providing the best medical care for their patients regardless of the cost. As medical costs have escalated, third-party payers have used various strategies to decrease the cost. Most strategies have resulted in discounted reimbursement for medical care. Health care organizations have focused on increasing efficiencies in order to remain solvent with decreasing reimbursements (Abbey, 1997).

Many studies have shown that different factors have an impact on ambulatory care efficiency. Miller, Struckhoff, and Drake (1985), in their financial analysis of an internal medicine unit, stated,

Financial productivity of a unit's clinical activities depends on a complex set of factors. Such factors include mix of health care providers, total hours worked and number of patients seen per week by each provider type, faculty physician time spent supervising trainees and non-physician providers, time and charge by visit category, amount and type of support staff, practice location, provider and room scheduling, overhead allocation system, distribution of ancillary profit, payer mix, time taken from clinical practice by the education program, and credit for indirect financial contributions to other parts of the medical center (p. 2093).

Measuring efficiency. In order to study and compare efficiency, it must be measured. Productivity is harder to measure in health care than it is in a classical manufacturing industry. An industrial worker's productivity can be measured by counting units of output per unit of time (widgets/hour). In health care, many different types of products are produced, and all health care interventions do not result in improving the overall health of the patient (Zaslove, 1998). The most common measures of outpatient provider productivity are patient visits per unit time (visits/month) and revenue generation per unit time (revenue/month). Visits per month data are easiest to collect and evaluate, but doing so ignores variations in the content of the visits and the health of the patient. Physicians who perform procedures or who care for sicker patients may appear to be less productive than others. Revenue per month accounts for these differences. Reimbursement for health care services is related to the value of the

services. When using this system, one reimbursement rate should be used to avoid contamination of the data by charity and discounted services. The problem with this metric is that it is more expensive and manpower intensive to collect (Hurdle and Pope, 1989). Glass, Pieper, and Berlin (1999) recommend that provider efficiency be measured by relative value units (RVUs) that weigh patient visits based on the relative value of the visit. They also recommend that patient satisfaction, quality of care, collegiality, teamwork, and academic teaching and research also be factored into the total equation.

Efficiency drivers. Physician support has an obvious impact on provider productivity because physicians may delegate tasks to nurses, aides or physician extenders. Reinhardt (1975) calculated that increasing the number of medical support personnel from 2 to 4 per physician would increase productivity from 25 to 55%. Wheeler, Wickizer, and Shortell (1986) determined that the number of clinical support staff and the number of administrative support staff both had an independent positive correlation with physician productivity. Conversely, Roberts (1977) was not able to demonstrate increased productivity by adding nursing staff.

Physician extenders, although a relatively new phenomenon in medical care, have significantly increased physician productivity (Wheeler, Mickizer, and Shortell, 1986). Record (1979) concluded that physician extenders could perform 75 to 90% of primary care services. Holmes, Livingston, Bassett, and Mills (1977) demonstrated that physicians working with nurse practitioners were 31% more productive than physicians working with a clinical nurse. Zeckhauser and Eliastam (1977) concluded that a physician assistant could replace half of a physician. LeRoy and Solkowitz (1980) reported productivity increases of 20% to 90% when nurse practitioners were added to

physician practices. Golladay, Smith and Miller (1972) calculated that a physician assistant increased a physician's productivity by 49% to 74%.

The type of practice has shown in several studies to have an impact on provider productivity. Kimbell and Lorant (1977) found that physicians in small groups were more productive than solos, and that large groups were less productive. Luft (1981) noted similar findings, and saw the small group of two to five physicians as the most productive practice arrangement. Brown and Lapan (1981) found that physicians practicing in groups were 18.3% more productive than solo providers. Hurdle and Pope (1989) noted a 13% increase in productivity in physicians who practiced in groups of two to four as compared to solo providers. Wheeler, Wickizer, and Shortell (1986) studied hospital-sponsored primary care group practices and noted that a multispecialty group organization was negatively related to productivity. Active physician training programs may also increase productivity. Kahn, Wirth, and Perkoff (1978) found that residents increased staff physician productivity in both pediatric and internal medicine clinics. Lindemuth, Stone, and Donaldson (1978) determined that third year medical students also increase staff productivity in outpatient internal medicine clinics.

Other practice characteristics also have an impact on productivity. Physicians who are reimbursed on a fee-for-service method have an incentive to work longer hours and see more patients. Salaried physicians' productivity is 83% of the productivity of fee-for-service providers (Kongstvedt, 1997). Location is also important; physicians who work in areas where there is a high saturation of primary care providers or a low demand for medical care have lower productivity than other physicians (Hurdle and Pope, 1989).

Some patient characteristics have an impact on productivity. Ekwo, Dusdieker, Bean, and Daniels (1980) demonstrated that the length of an office visit (and thus the number of patients that could be cared for in a given amount of time) was directly related to the age of the patient and the type of illness. Hurdle and Pope (1989) stated that physicians working with a poorer population would be less productive due to the patients waiting as long as possible before seeking care and presenting with higher morbidity.

Some provider characteristics are also important factors in productivity. Experienced physicians between ages 45 and 53 were found to be the most productive. Female physicians saw fewer patients, but appeared to generate the same revenue as their male counterparts (Hurdle and Pope, 1989). Wheeler, et al. (1986) also noted that productivity increased when physician pay was tied to it, and that high physician turnover had a negative relationship with their productivity.

The great volume of literature on improving primary care efficiencies testifies to the current interest in this area. The Institute for Healthcare Improvement, a non-profit organization supported by many healthcare organizations, was formed to study how to gain efficiencies in ambulatory care. This organization holds annual conferences and seminars to help healthcare organizations maximize their efficiencies (Terry, 2000). Many articles are anecdotal reports from experienced physicians or administrators who have successful practices and share tips with other providers. The Institute for Healthcare Reform is attempting to study different methods of operation and to recommend best practices. The Medical Group Management Association (MGMA) also collects data on best practices and publishes them in annual reports (MGMA, 1999).

Tufano, Conrad, and Liang (1999) listed four “conceptual drivers” of physician productivity: complementary inputs (support staff, supplies, office layout, etc.), individual physician attitudes, financial incentives, and the medical group structure and culture. All of these drivers can be modified to increase productivity, but some are more difficult to change than others. Most of the published material on improving efficiencies in primary care focus on the first of Tufano’s drivers, complementary inputs. Scheingold (1990), Lowes (1997), Bartlett (1999), and Chesanow (2000) stressed delegation of non-physician duties to support staff to increase productivity. Tinsley (1999) discussed the importance of using a “superbill” to assist physicians in coding their patients. Scheingold (1990) and Chesanow (2000) also discussed redesigning office procedures for better efficiency.

Techniques for improving efficiency. The appointment system is a key factor in practice efficiency. General opinion as to the best type of appointment system has changed over time. The oldest system was not an appointment system at all. Patients presented to the physicians office and were cared for on a first come, first served basis. Wave scheduling was the first system in which appointments were given. Groups of patients were given an appointment for the morning or the afternoon and presented in blocks. They were again cared for in the order of their arrival. This system was efficient for the providers because they were able to take care of their patients at one time, but it was extremely inefficient for the patients who had to wait up to 3 hours to see the doctor. Stream scheduling was the next system to gain favor. In this system, each patient was given a specific appointment and the provider tried to keep to his schedule and care for the patient at the specific appointment time. This was better for the patient because he

did not need to wait as long for a provider, but was less efficient for the providers. Patients were not always available when the provider was ready to see the next patient and the provider frequently had many small breaks between patients that were not long enough to start another task. Modified wave scheduling became more popular in the mid to late 1980's. In this type of scheduling the patients scheduled during an hour were pushed toward the beginning of the hour to ensure that they were available to see the physician and to lump any provider non-patient-care time at the end of the hour. This allowed the provider to accomplish other tasks at the end of the hour (Donohugh, 1986).

The most recent change in scheduling practice is "advanced access" or "open access". In this system, championed by Dr Murray (2000), the provider schedules are opened to provide same-day appointments for the patients. This system can be used with either stream or modified wave scheduling. The idea is to offer everyone who calls for an appointment a same-day appointment. In order to do this, the providers have to work extra hours for 6 to 8 weeks to take care of the backlog of patients waiting for appointments. Once the long waiting list is gone staff resources that were utilized on triage, telephone calls and managing the long backlog of patients can be used for patient care. Under open access, 56-70% of the appointments at the start of the day are open, unlike the traditional model where 90-100% of the appointments are booked and acute patients are double booked or fit in as possible. Open access, although it requires more provider time when it is first set up, saves provider's time by decreasing their time on the telephone and triage. It increases their productivity by decreasing the patient no-show rate and improves the quality of care by allowing patients to schedule with their own providers. This system also simplifies the appointment system. There is no longer a

need for many different types of appointments. The schedule is flexible and easily modified as demand dictates. It decreases demand by encouraging physicians to spend more time with their patients and group their needs/requests into one appointment instead of having them return for a visit at another time.

In order to operate most efficiently, medical practices must have a good system to eliminate unkept appointments. Most unkept appointments are caused by patients scheduling well in advance of the visit and forgetting their appointments. Black (1979) found that starting a nursing relationship with new patients reduced the no show rate for first-time patients 75%. Koren, Bartel and Corliss (1994) found that patient reminder systems were very effective in reducing the no-show rate in a medical ambulatory care center. A telephone call 24 hours in advance of the appointment resulted in a 31% reduction in the no-shows. A letter was almost as effective with a reduction of the no-shows by 27%. Olian (1987) recommended that all patients who leave the office with a follow-up appointment should be given a card with the information written on the card. He also recommended that any patient with an appointment 30 minutes or longer should be given a personal telephone call 1-2 days in advance to remind the patient of the appointment. Tinsley (1999) recommended that all patients should be reminded about scheduled appointments.

Demand management is an old term that is associated with HMOs keeping patients away from the care that they need. Today, the more appropriate term to use is demand shaping. Demand shaping attempts to match the patient with the appropriate level of care at the appropriate time. Reducing demand for appointments is important in a managed care environment. Efficiencies are gained by allowing providers to empanel

more patients. Grandinetti (1996) and Lowes (1997) advocate nurse advice lines and nurse triage to shape patient demands. The nurses use a standard protocol when talking to the patients and reduce office visits by 30%. They also schedule appointments and provide education to patients. Telephone calls can utilize a large amount of provider time. Wheeler and Siebelt (1997) demonstrated that phone calls require an average of 6 minutes of provider time and that 60% of the patients ended up visiting a provider. Greenfield (1989) recommended that nurses should handle the majority of the issues, and that physicians schedule 30 minutes at the end of the day to return calls.

Information systems offer great opportunity to improve efficiencies in primary care. Zaslove (1997) stated that a computerized record system increases provider productivity 13%. Jefferson Family Physicians was highlighted by MGMA (1999) for a telephone system that allows providers to dictate laboratory results on a phone message and patients to obtain their results by retrieving their personal messages. E-mail is frequently used to communicate with patients instead of telephone calls. It is adequate for most non-urgent concerns and is more efficient for the provider and the patient.

Metrics can be utilized to track provider productivity and increase efficiency. Greenfield (1989) recommended three measures: productivity, appointment fill ratio, and wait time for appointments. He stated that appropriate managerial controls and actions such as adding or decreasing staff, increasing appointments in provider templates, and changing the appointment mix could be made with the three metrics. Productivity metrics are most effective at increasing efficiencies if they are tied to financial incentives. To ensure the best medical care, quality of care and patient satisfaction should also be tied to the provider incentives.

It is more important to optimize patient care than to merely increase patient care output as much as possible. When physicians are too focused on a metric such as the number of patients that they see each day, they may only handle one issue during a patient encounter, putting off to another time additional medical care that could have been accomplished during that visit. This results in more visits per physician per day, but less efficient provision of medical care for the patient and the provider (Terry, 2000). Camasso and Camasso (1994) studied the impact of increasing throughput of patients in primary care on the provision of preventive medicine. They found that providers who cared for more than 3.8 patients per hour used ancillary staff and consultants more than those who were less productive. Their patients tended to visit their physician more often than patients of those providers who care for less than 3.8 patients per hour. They also noted that primary care providers who cared for more than 3 patients per hour documented less medical history, provided less preventive medicine care for females, and provided less education on smoking cessation and the dangers of alcohol abuse than providers who saw 3 or less patients per hour.

Productivity benchmarks. Several studies were accomplished on the average productivity of primary care providers. The American Medical Association (1994) reported the productivity of fee-for-service primary care providers from a self-reported survey. Family practice reported an average of 109.5, pediatrics 99.6, and internal medicine 62 outpatient visits per week. Guglielmo (1996), and Preston (1999) surveyed physicians for medical economics. Their self-reported data showed that primary care providers were caring for more patients in 1999 than in 1996. Guglielmo (1996) reported that general practitioners cared for an average of 90, family practitioners 114,

pediatricians 120, and internists 80 outpatients per week. Three years later, using the identical survey, Preston (1999) reported that general practitioners cared for an average of 93, family practitioners 120, internists 90, and pediatricians 121 outpatients per week. Productivity is also frequently measured in the units of patients per hour. Family practice average productivity was reported as 2.7 to 3.6 patients per hour (Hurdle and Pope, 1989; Camasso and Camasso, 1994). Greenfield (1989) stated that the objective should be to maintain productivity at 3.5 patients per hour. Kahn, et al. (1978) reported average productivity as 2.9 patients per hour for pediatrics and 2.6 patients per hour for internal medicine.

### Patient Satisfaction

Patient satisfaction is defined as "a health care recipient's reaction to salient aspects of his or her service experience" (Cleary and Mc Neil, 1988, p. 26). Utilizing the Donabedian model (Donabedian, 1980), it could be classified as an emotional reaction to the structure, process, or clinical outcome of the medical care system. Many writers have documented the importance of measuring patient satisfaction (Aharony and Strasser, 1993; Marquis, Davies, and Ware, 1983; Strasser, Aharony, and Greenberger, 1993). High patient satisfaction results in better patient compliance with medical care regimes, faster patient recovery, and stronger doctor-patient relationships (Marquis, Davies, and Ware, 1983; Ware and Snyder, 1975; Hulka, Cassel, Kupper and Burdette, 1976). Well-managed healthcare organizations continuously ensure that the needs of their patients are being met by monitoring patient satisfaction.

While it is clear that it is important to measure patient satisfaction, it is difficult to develop a reliable measurement tool and to have universal utilization of the tool for

standardization and comparison across organizations. Different tools can have large differences in patient satisfaction ratings. Ware, Snyder and Wright (1977) demonstrated a response variability of 1% to 77% for five different measurement tools. Ware and Hayes (1988) also showed consistently lower scores when satisfaction was measured using a 5-point evaluation rating scale, (poor, fair, good, very good, excellent) compared to a 6-point satisfaction rating scale ranging from "extremely satisfied" to "very dissatisfied." Most authorities currently support a survey that measures multiple facets of satisfaction following a specific episode of medical care (Pascoe, 1983; Ware and Hayes, 1988). Quality of medical care, time with physician, technical competence, interpersonal care, access, convenience, cost, office waiting time, facilities, and doctor-patient communications have all been evaluated as facets of satisfaction (Ware and Snyder, 1975; Kane, Maciejewski, and Finch, 1997). Of these facets, technical competence and interpersonal care have consistently shown to be the most highly indicative of overall satisfaction (Ware and Snyder, 1975).

What causes a patient to be satisfied or dissatisfied following a health care encounter? This question has been the topic of volumes of research. Table 1 delineates the determinants of patient satisfaction outlined according to the Donabedian Model. High patient satisfaction is associated with allowing the patients to choose their provider and empanelling them to one provider (Schmittiel, Selby, Grumbach, and Quesenberry, 1997). Autonomous providers, same day appointments and smaller practices are also associated with greater satisfaction (Steven and Douglas, 1988; Sixma, Spreeuwenberg, and van der Pasch, 1998; Greenley and Schoenherr, 1981). Patient characteristics are strongly associated with overall satisfaction. Older, healthier, female patients with lower

expectations are likely to be more satisfied (Pascoe, 1983; Mangelsdorff, 1994; Rubin, 1990; Ware, Davies-Avery and Stewart, 1978). Patient satisfaction also tends to increase with highly productive middle-aged male providers (Ross, Mirowsky, and Duff, 1982; de Bakker, 1991). Patients tend to prefer providers who spend more time with them, perform more physical exams and blood tests, refer to specialists frequently, prescribe less medication, and spend time educating them about how to stay healthy (de Bakker, 1991). The most important variable in the patient-physician encounter was meeting the patient's requests. Like (1987) found that this single variable predicted over 20% of the variance in overall satisfaction. Specific patient outcome has not been well correlated with patient satisfaction. Carmel (1985) and Fleming (1981), in separate studies, found a correlation between self-reported improvement in health and satisfaction. Kane et al. (1997) was able to identify a significant correlation between empirical measures of outcome, but they only accounted for 8% of the variability in the satisfaction and were less predictive than subjective measures of outcome.

Although much has been written concerning patient satisfaction, there is a paucity of research on patient satisfaction in military medical facilities. Mangelsdorff, in his 1994 article on patient satisfaction in Army MTFs, delineated several factors that were correlated with satisfaction. He found that older retired patients were generally more satisfied than younger patients. He noted that officers and their dependents were more satisfied than enlisted members and their dependents. He also noted that most positive attitudes toward Army medicine were in interpersonal care, communication, outcomes, technical quality and cost. The lowest ratings were in choice of provider and telephone

access for medical care. The determinants of patient satisfaction as measured by the MHS survey have not been evaluated for satisfaction in Air Force MTFs.

#### Satisfaction Among Health Professionals

Physician satisfaction is important in the military health care system because of physician retention, quality patient care, and patient satisfaction. When physicians are satisfied, they are more likely to remain in a healthcare organization (Lichtenstein, 1984; Mick et al. 1983). Low physician turnover contributes to better continuity of care and higher quality patient care (Mechanic, 1975; Grol, 1985; Skolnik, Smith and Diamond, 1993). Because of these and other factors, patient satisfaction is also highly correlated with physician satisfaction (Linn, Yager, Cope, and Leake, 1985; Linn, Brook, et al. 1985).

Several physician characteristics have been found to be related to physician satisfaction. Age and military rank have both been shown to be positively associated with physician satisfaction (Mangelsdorff and Hubbart, 1976; Kravitz et al. 1990). Surgeons tend to be more satisfied, while general practitioners and pediatricians are the least satisfied specialty (Mawardi, 1979).

Lichtenstein (1981) found that organizational variables were more predictive of physician satisfaction than individual variables. He noted that more bureaucratic organizations had lower physician satisfaction. Likewise, Baker and Cantor (1993) noted that self-employment had a positive effect on satisfaction; however, a practice with less than three providers was negatively related to satisfaction (McCrane, Hornsby, and Calvert, 1982; Skolnik, et al. 1993; Warren, Weitz, and Kulis, 1998). Prepaid groups and governmental medical care providers were also noted to have lower physician satisfaction

than other medical groups, however, they were more satisfied with their work hours (Lichtenstein, 1981). Full-time academic physicians had the highest satisfaction of the practice environments studied by Mawardi (1979). Pay incentives also appear to be related to physician satisfaction. Bonuses for quality of care and patient satisfaction have a positive effect on physician satisfaction; however, bonuses designed to increase productivity have a negative effect on physician satisfaction (Grumbach, Osmond, Vranizan, Jaffe, and Bindman, 1998).

Many studies have been conducted to determine physician satisfaction, however, many different methods were used. Some surveys have only a few questions that measure overall provider satisfaction (Warren, 1999; Hadley, 1997) while others are very long and complicated, measuring many different facets of provider satisfaction. Lichtenstein (1984) used a seven-point scale to evaluate satisfaction among physicians working in the US prison health system. The 37-question survey contained 33 questions on specific aspects of satisfaction and four questions which measured global satisfaction. The 33 specific questions were grouped into 7 domains: resources, self-directed autonomy, other-directed autonomy, patient relationships, professional relationships, status, and pay.

Kravitz, Linn, and Shapiro (1990) evaluated the satisfaction of private physicians practicing in Ontario, Canada. They used a 16-question survey to evaluate satisfaction in four domains: quality, rewards, patients, and environment. A five-point scale from 1 (very dissatisfied) to 5 (extremely satisfied) was used to rate the questions. Overall satisfaction was determined by averaging the satisfaction results from the 16 questions.

Cashman, Parks, Ash, Hemenway and Bicknell (1990) utilized a 9-page survey to determine the satisfaction of US physicians working for Health Stop, a chain of ambulatory care centers. They utilized 26 questions to determine satisfaction in 7 domains: autonomy, organizational policies, patient relationships, reimbursement, professional relationships, resources, and status. They also utilized four questions to determine overall satisfaction. A Likert scale was used to evaluate the statements on a five-point scale from agree to disagree.

Lewis, Prout, Chalmers, and Leake (1991) conducted a national survey of internal medicine physicians to determine their level of satisfaction. They measured 7 domains of satisfaction: relationships with patients, professional challenges, interaction with colleagues, current income, potential income, time for nonmedical interests, and personal control over their practice. They also measured overall satisfaction.

Skolnik, Smith and Diamond (1993) surveyed family practitioners in Pennsylvania to determine their level of satisfaction. They utilized a 31-item questionnaire to measure 13 satisfaction domains: amount of leisure time, income, ability to make decisions about practice management, autonomy, status within medical community, general professional life, intellectual stimulation, status within the community, ancillary services in the office, relationship with patients, relationship with partners, clinical competence, and patient relationships. They averaged the results of the domains to determine overall satisfaction.

Bailie et al. (1998) studied the satisfaction of Australian general practitioners. Their 50-item questionnaire measured overall satisfaction and 47 satisfaction factors which were grouped into 12 domains: social and interpersonal activities, problem

solving, support for chronic and aged, procedural work, research and teaching, organization, government, financial, interference by physician organizations, disillusionment, inadequacy, and competition. Responses were scored on a 4-point "Likert" scale (strongly agree, partly agree, partly disagree, strongly disagree.)

Konrad et al. (1999) utilized a six-step process similar to a Delphi study to build a survey instrument for physician satisfaction. Their survey instrument included 89 statements to evaluate 10 satisfaction domains: autonomy, relationships with colleagues, relationships with patients, relationships with staff, personal time, intrinsic, community, pay, administration, and resources. The survey also evaluated three aspects of global satisfaction: satisfaction with the job, satisfaction with the specialty, and satisfaction with the career of medicine. They utilized a five-point agree/disagree format to evaluate the statements.

Many surveys were also conducted to determine military physician satisfaction. Kravitz, Sloss, Thomas, and Hosek (1993) surveyed 1,392 physicians with a 22-item questionnaire which measured 5 satisfaction domains: quality of care, pace and continuity of practice, quality of support staff, rewards of military practice, and personal time. Global satisfaction was also measured directly. The statements were rated on a five-point scale from very satisfied to very dissatisfied. Byers (1999) studied primary care providers in Army primary care clinics. She surveyed physicians, nurse practitioners, and physician assistants in three medical centers. She utilized 22 questions on specific aspects of satisfaction grouped into 5 domains: practice model, confidence, autonomy, collaboration, and information giving. She also surveyed overall satisfaction. A

"continuous, time-oriented scale" (never satisfied, sometimes satisfied...always satisfied) was utilized to measure levels of satisfaction.

Measurement of non-physician health care worker satisfaction is not documented as well as measurement of physician satisfaction. Stamps, Piedmont, Slavitt and Haase (1978) surveyed nurses, physicians and support staff in ambulatory care centers. Their survey instrument measured 60 facets of satisfaction grouped in 6 domains: autonomy, job status, pay, task requirements, interaction, and organizational requirements. They utilized a seven-point Likert scale to measure the level of satisfaction. They also had the respondents rank the relative importance of the specific facets. Overall satisfaction was determined by weighing the facets by their relative importance and averaging. Traynor and Wade (1993) measured the satisfaction of community health nurses in Britain. They utilized 38 items to evaluate satisfaction in 5 domains: personal satisfaction, workload, professional support, training, and pay/prospects. A five-point scale from very dissatisfied to very satisfied was used to measure the level of satisfaction. Overall satisfaction was calculated as an average of all 38 facets.

The sum of all of this research on provider satisfaction is a significant amount of information on the factors that satisfy providers and those which frustrate them. The three most important factors in provider satisfaction are: autonomy, patient relationships, and income. Autonomy is documented in many studies as the key indicator of provider satisfaction. Lichtenstein (1981) stated, "The facet of satisfaction that appears to influence overall satisfaction most powerfully is satisfaction with autonomy" (p. 165). Many other studies also support the importance of autonomy (Reames and Dunstone, 1989; Cashman, et al. 1990; Kravitz, et al. 1990; Lewis, et al. 1991; Kravitz, et al. 1993;

Warren, et al. 1998; Byers, 1999). Autonomy was shown to be important in physician satisfaction in regards to clinical care (Skolnik, et al. 1993; Bailie, et al. 1998), clinic policies (Kravitz, et al. 1993) and in organizational decision making (Barr, & Steinberg, 1983). A relationship with patients and their families is also a very important satisfier for physicians. This relationship, however, can work as a positive or negative factor. Physicians enjoy caring for patients who trust them, are compliant with medical directives, and grateful for the doctor's assistance (Cashman, et al. 1990; Lewis, et al. 1991; Kravitz, et al. 1993; Skolnik, et al. 1993; Bailie, et al. 1998; Warren, et al. 1998). Patients who are demanding, with unreasonable expectations can, on the other hand, diminish physician satisfaction (Sullivan, and Buske, 1998). Physician income is also related to physician satisfaction. Physicians are particularly dissatisfied by a loss of income due to discounted fee-for-service or capitation (Cashman, et al. 1990; Kravitz, et al. 1990; Lewis, et al. 1991; Kravitz, et al. 1993; Bailie, et al. 1998; Sullivan, and Buske, 1998; Warren, et al. 1998).

Other factors that were also found to be of significant importance in physician satisfaction include: partner collaboration, challenging work, lack of time for personal interests, administrative workload, and government/third party interference. Providers like to be able to discuss difficult patients with their partners and to seek assistance from specialists without excessive administrative burden (Lewis, et al. 1991; Kravitz, et al. 1993; Skolnik, et al. 1993; Byers, 1999). Physicians also like to treat a wide variety of different types of cases. They like to be challenged and to feel that they have done a good job (Lewis, et al. 1991; Skolnik, et al. 1993; Bailie, et al. 1998). A significant cause of low morale in private practice physicians is a lack of time to spend with their families

or to pursue personal interests (Skolnik, et al. 1993; Bailie, et al. 1998; Sullivan, and Buske, 1998). Time for personal interests was rated as a positive factor for physicians who worked in prepaid groups and in governmental health care organizations (Lichtenstein, 1981). Physicians are notorious for their dislike of all administrative duties. It is not a surprise to find that the amount of paper work that physicians were required to accomplish was negatively correlated with their satisfaction with their job (Lewis, et al. 1991; Skolnik, et al. 1993). Government, HMOs and other third party payers have taken a more active role in patient care. The utilization management process and justifying care that their patients need is a part of third party payers attempts to reduce the cost of medical care. This had a significant adverse impact on the provider's satisfaction (Skolnik, et al. 1993; Bailie, et al. 1998; Sullivan, and Buske, 1998; Warren, et al. 1998).

Other factors also have an impact on provider satisfaction. Quality medical care, office support, and the fear of litigation have a role in physician satisfaction. Kravitz et al. (1993), in his survey of Army physicians, noted that the quality of medical care that they were able to provide was the second highest satisfaction factor. He also noted that the amount of time that they could spend with the patients had a positive effect on their satisfaction. Office support, or lack thereof, also had an important impact on provider satisfaction. Having the resources to care for patients (Cashman, et al. 1990), and good nursing support (Kravitz, et al. 1993) had positive effects on provider satisfaction, while poor office efficiency and the lack of clerical support staff had a negative impact on satisfaction (Kravitz, et al. 1993).

Factors that cause satisfaction in physician extenders are very similar to those things that satisfy physicians. Chung-Park (1998) studied Navy nurse practitioners' satisfaction. She found that autonomy, sense of accomplishment, and time spent in patient care were found to be most closely related to satisfaction, while pay, lack of support staff, administrative workload, and time constraints were found to be the greatest frustrations.

Autonomy, patient relationships, lack of support staff, excessive workload, and administrative duties also have an impact on the satisfaction of medical support personnel (Stamps, et al. 1978; Allgood, Orourke, VanDerslice, and Hardy, 2000). Additionally, training, professional support, and task requirements are related to support personnel satisfaction (Stamps, et al. 1978; Traynor and Wade, 1993).

#### Purpose

The purpose of this study was to determine the impact of the Air Force's Primary Care Optimization Program on three areas: first, the efficiency of the ambulatory care clinics; second, the staff satisfaction of the optimized primary care team members; and third, patient satisfaction. The null hypothesis was: There is no difference when comparing efficiency of ambulatory care clinics, staff morale, and patient satisfaction before and after implementation of the Air Force's Primary Care Optimization Program.

#### Method and Procedures

##### Efficiency

This study gathered information from several different sources to evaluate efficiency, staff satisfaction, and patient satisfaction. Efficiency was evaluated using two methodologies. Administrators were asked in the Extent of Change Surveys to report the

average number of enrollees per provider for their optimized clinics and the number of visits per PCM per day before optimization and at the time of the survey. Providers were also asked in the individual surveys to report their average productivity in patients per day before optimization and after optimization. Patients per day was utilized for daily productivity instead of RVUs per day because RVUs were not being utilized in the Air Force Medical Service.

#### Staff Satisfaction

A seventy-six question survey was developed to measure current staff satisfaction and their change in satisfaction with the advent of PCO and mailed to all Air Force Military treatment facilities (MTFs). Current staff satisfaction was evaluated using a satisfaction survey developed from previous research and modified to ask about factors associated with PCO (Byers, 1999; Cashman, et al. 1990; Kravitz, et al. 1990; Kravitz, et al. 1993; Konrad, et al. 1999; Lewis, et al. 1991; Lichtenstein, 1984; Skolnick, et al. 1993; Stamps, et al. 1993; Traynor & Wade, 1993). The survey divided 35 facets of satisfaction into ten categories: satisfaction with the workload; satisfaction with the treatment team; satisfaction with facility, equipment and supplies; satisfaction with practice autonomy; satisfaction with the organization; satisfaction with professional experience; satisfaction with patient relationships; satisfaction with treatment team efficiency; satisfaction with the quality of medical care; and satisfaction with pay and opportunities for promotion. Overall satisfaction was measured directly with two questions. A seven-point scale fixed at three points, 1 (very dissatisfied), 4 (neutral), and 7 (very satisfied) was used to record responses.

The change in the staff's satisfaction because of PCO was measured by making each satisfaction question a two-part question. The first part asked for their current satisfaction in a particular facet, the second part asked for their "change in satisfaction in area listed above following implementation of PCO". A similar seven-point scale fixed at three points, (large decrease in satisfaction), 4 (neutral), and 7 (large increase in satisfaction) was used to record the responses. The change in overall satisfaction was measured in a similar fashion using two different questions. Two additional questions were asked to determine their satisfaction with primary care optimization: would you do it again and would you recommend it to a friend. These were also evaluated on a seven-point scale. Separate questionnaires were used for providers, nurses, medical technicians, administrative technicians, group practice managers, and health care integrators. The questionnaires differed in number of questions and the wording of the questions asked (Appendix A).

All individual staff satisfaction surveys also included two pages of demographic, productivity, efficiency, and work questions. This included questions about the amount of time working in an optimized clinic, the level of support staff, productivity, and hours worked per week before and after PCO. It also asked about the type of work performed before and after PCO. Throughout the entire survey, written comments were solicited and the PCO staff members were given telephone numbers to call the researchers if they did not feel comfortable writing their comments on the survey.

An additional survey, the Extent of Change Survey, was developed to determine the number of clinics and providers that had been optimized at each MTF, and to quantify the extent of change in the optimized clinics. Facility administrators were asked to

indicate the number of providers that had been optimized between Dec 99 and Oct 00 and then to quantify the support staff for these providers in the Oct – Dec 99 time period and the Oct – Dec 00 time period. They were also asked for the number of examination and treatment rooms available for each provider in each of the time periods. Specific methods to optimize providers were also listed and the administrator was asked to determine if the methods were utilized during either of the time periods. Finally, the administrators were asked to indicate the number of enrollees to each provider in the two time periods and the average number of outpatient visits for each provider in the two time periods (Appendix B).

The Extent of Change Survey and the Staff Satisfaction Surveys were mailed to all Air Force MTFs. MTF points of contact were asked to copy a staff satisfaction survey for each of their staff assigned to PCO teams. They distributed the surveys and collected them after completion by the team members. Extent of Change Surveys were also completed for each clinic where PCO had been implemented before 1 Oct 00. After completion, the staff satisfaction surveys were attached to their corresponding extent of change surveys and were mailed back to the researchers. Two researchers handled all of the data entry of the surveys. One researcher validated the information on the Extent of Change Surveys and made personal contact with each MTF to assure accuracy of the information on the survey. He also transcribed the written comments from the individual surveys. The other researcher entered the individual survey responses into SPSS. Overall scores for the 10 groups of satisfaction were calculated by averaging the scores of the facets of satisfaction within the group (Tables 2-3). Overall satisfaction was

determined directly from question 71. Overall change in satisfaction was calculated by averaging the four questions pertaining to change in satisfaction (Table 4).

Stepwise multiple linear regression was utilized to correlate variables that impact on satisfaction to aspects of staff satisfaction. The stepwise method considers all independent variables that are significantly correlated with the dependent variable and accepts the one that has the largest coefficient of determination. It then considers all of the variables again, only the second time it considers each variable in regards to the increase that it would cause in the coefficient of determination for the entire model. It continues to add variables until adding additional variables would not increase the coefficient of determination.

#### Reliability and Validity of the Survey Instrument

Sixty-six of the seventy-three Air Force MTFs that were mailed surveys participated in the study. Four MTFs did not participate because their PCO teams were not set up until after 1 Oct 00. The MTF participation rate in the survey was 90.4%. The extent of change forms identified 1742 individuals that worked on PCO teams. Of these staff members, the targets for the survey, 1366 returned surveys, 29 surveys were rejected due to incomplete data, leaving 1337 valid surveys. The individual response rate was 74.3%

The reliability of the survey was measured using Chronbach's Alpha. Tables 2-4 delineate the ten distinct satisfaction groups and the facets of satisfaction included in each group. Chronbach's Alpha was calculated for both the current satisfaction and the change in satisfaction in each group. All ten groups were found to have good internal reliability with Alphas between .7095 and .9166. Alphas over .7 are indicative of good

internal reliability. The original plan was to measure the overall satisfaction using a question about overall satisfaction with current position and a question asking if the individual plans to separate from the military. These questions did not have good internal reliability and thus were uncoupled and considered separately in the analysis. Overall change in satisfaction, measured with four questions, demonstrated excellent internal reliability with an Alpha of .8458 (Appendix C).

The content and construct validity of this survey instrument should be very good. It was generated from other survey instruments that have a long history of use to measure staff satisfaction in medical facilities (Byers, 1999; Cashman, et al. 1990; Kravitz, et al. 1990; Kravitz, et al. 1993; Konrad, et al. 1999; Lewis, et al. 1991; Lichtenstein, 1984; Skolnick, et al. 1993; Stamps, et al. 1993; Traynor & Wade, 1993). It was also beta tested at an Air Force MTF within the continental United States, and an Air Force MTF located in Europe. The survey had an excellent response rate and good internal reliability.

#### Patient Satisfaction

Changes in patient satisfaction were evaluated by using the monthly military health system (MHS) survey (Appendix D) at a time before optimization and comparing it with the same survey after optimization. This survey was utilized throughout the Department of Defense since 1995 with very few modifications to the survey instrument (U.S. Office of the Secretary of Defense, 1998). The validity and reliability of the instrument have been carefully studied and found to be excellent. The standard for internal consistency validity is .40. For the MHS monthly survey it was measured at .40 to .80, but the majority of the measures were over .70. Item discriminant validity was

also measured with over 80% of the facets of satisfaction showing statistically significant correlation. Chronbach's Alpha was used to measure the internal consistency reliability of the survey. Surveys that obtain Alpha scores of .7 and higher are considered to be reliable. The MHS monthly survey had Alpha scores of between .735 and .943 (U.S. Department of Defense, 2001).

Most Air Force facilities implemented primary care optimization between January and September 2000. All Air Force MTFs were surveyed with an Extent of Change Survey to determine which specific clinics were involved in optimization, and when they were optimized. The clinics that were optimized between 1 January and 1 September 2000 were utilized in the study. Individual patient satisfaction data was obtained from the Department of Defense, Health Affairs for the time periods September-November, 1999 and September-November 2000. Twenty-one measures of satisfaction were compared between the two time periods. Overall satisfaction with the medical care and clinics was measured directly (questions 5 and 12) on a seven-point scale from 1 (completely dissatisfied) to 7 (completely satisfied). Three satisfaction averages (Access, Quality, and Interpersonal Relationship) were calculated from 16 directly measured facets of satisfaction. These were measured on a 5-point scale from 1 (poor) to 5 (excellent). The data were weighted to account for response bias, MTF size and clinic size. Clinics that did not have at least 20 patient satisfaction survey responses in either of the time periods were excluded from the study. A paired t-test was utilized to compare the clinic patient satisfaction scores before and after the implementation of primary care. A significance level of .05 was utilized.

## Results

### Efficiency

This survey demonstrated a real increase in productivity on the primary care teams that were optimized. Table 5 shows the enrollees per PCM and outpatient visits per day as collected by the extent of change forms and the staff satisfaction surveys. Both means and medians are listed to approximate the average. The median is used in the analysis instead of the mean because it is not affected by a skewed distribution. All distributions showed a degree of skewness, mostly to the right. Before PCO, the average enrollment in clinics that were later optimized was 963.7 per provider. One year later, this enrollment increased to 1269.0 per provider, an increase of 31.7%. Daily productivity also increased significantly, from 14 to 19 patients per day as reported on the Extent of Change Survey. Providers reported their productivity to have increased from 19 patients per day to 23 patients per day. Providers reported higher productivity than administrators, an average of 3-5 patients per day more. Utilizing either method of reporting, productivity increased substantially, 35.7 % as reported on the extent of change form, 21.1% by self-reporting.

The providers were also surveyed to determine how close they were to their maximum possible productivity. They were asked, "If you had all of the nurses, technicians, exam rooms and other support that money could buy, how much could you increase your current productivity?" Their responses are in table 6. The responses ranged from 0 to 300%. Their average untapped productivity was 25%. Despite optimization, which has increased productivity 20 – 35%, providers indicate that with

additional resources they could still increase productivity an additional 25%. See Appendix E for full details of SPSS analysis.

### Staff Satisfaction

#### Descriptive Statistics

A total of 93 clinics were surveyed in this study. Family practice, pediatrics, primary care, internal medicine and women's health were all identified as optimized clinics (Figure 1). Three hundred-seventy eight optimized providers were identified in the extent of change form. Surveys were returned by 298 of the providers. Physicians included medical doctors and doctors of osteopathy. Physicians comprised 67% of the providers, physician assistants, 22%, and nurse practitioners 11%.

Demographics for the respondents are listed in Table 7. The average age of respondent was 31.5 years. Enlisted personnel were younger than officers. Physicians were younger than all other category of officers. Physicians and physician assistants (PAs) were predominantly male. Nurses, administrative techs and health care integrators were mostly female. Medical technicians and group practice managers were nearly evenly split in regard to gender. Most of the team members on the optimized teams were fairly junior in rank. Nurse practitioners and health care integrators were the most senior officers, their average rank was a senior captain. PAs were the most junior officers, followed closely by the clinical nurses. Group practice managers and health care integrators were mostly officers, but also contained a few senior enlisted. Physicians had the least experience in the military of the team members, averaging 5.2 years of military experience. Nurse practitioners had the most experience, 13.5 years. As expected, all team members had little experience in optimization, averaging 6.5 months. Physicians

had the least experience, 5.5 months. Health Care Integrators had the most experience, 8.4 months.

Satisfaction with workload.

Table 8 contains information about the number of hours that PCO team members work each week. This information was self-reported from the Staff Satisfaction Survey. Individuals were asked to report how many hours per week they currently work and how many hours per week they worked one year ago. Overall, staff members reported that they worked an average of 47.9 hours per week, 2.2 hours more than they did before PCO. This is an increase of 6%. Each type of worker reported to work more this year than last year, but nurse practitioners had the largest absolute increase (4.9 hours) and the largest percent increase (10.2%). Physicians reported the longest work week (54.1 hours), and administrative technicians the shortest work week (44.8 hours). Officers reported longer work weeks than enlisted members.

The staff satisfaction survey also asked the team members to estimate the percent of their time that they spent in different types of activities before and after primary care optimization. The activity analysis, stratified by worker type, is detailed in Tables 9 through 15. Looking at the entire PCO team, Table 9 demonstrates that there was a proportional decrease in time spent in outpatient care, resident training, and military readiness. There was an overall increase in administrative work, patient education, and staff training. Providers had an increase in staff training, administration, and outpatient care, but a decrease in inpatient care, resident training, military readiness preparation, and patient education (Table 10). Clinical nurses reported spending less time on outpatient care and more time in patient education, staff training and administration (Table 11).

Medical technicians spent significantly more time in patient education with reductions in staff training and military readiness preparation (Table 12). Administrative technicians reported spending more time in outpatient care, with decreases in military readiness and administration (Table 13). Group practice managers had the largest change in activities following PCO. They reported a 77% decrease in outpatient care activities and a 61% decrease in patient education duties. They also reported large increases in staff training, administration, and research (Table 14). Health care integrators also reported large changes in their activities. They shifted from outpatient care, patient education and military readiness to administration, staff training, and research (Table 15).

Overall satisfaction with workload was calculated from two facets of satisfaction, satisfaction with leisure time and satisfaction with pace of work (Table 2). The staff, as a whole, related neutral satisfaction with workload and a decrease in satisfaction subsequent to the implementation of PCO (Table 16). Providers were least satisfied in this area; health care integrators were most satisfied. Most types of team members reported a decrease in satisfaction in this area. Staff satisfaction with his/her level of leisure and family time is presented in Table 17. Overall, the staff was slightly satisfied with this aspect of their duties, but this satisfaction had declined over the year with optimization. The providers, especially the PAs and nurse practitioners, were less satisfied with their level of leisure time than the other team members. Health care integrators were most satisfied. All types of workers reported declines in satisfaction, but the PAs had the largest decrease in satisfaction in this area.

Table 18 shows the results of the second facet of satisfaction in the workload group, satisfaction with pace of work. The PCO staff rated this area of workload lower

than satisfaction with leisure time. There was an overall dissatisfaction with the pace of work and the staff's dissatisfaction had increased over the past year. The dissatisfaction was noted among all types of workers except the medical technicians and the group practice managers, who reported neutral satisfaction, and the health care integrators, who had a positive level of satisfaction. The providers and clinical nurses reported the largest decline in satisfaction in this area.

Satisfaction with the treatment team.

On the Extent of Change Survey, hospital administrators and group practice managers were asked to report the support staff assigned to providers who were then optimized and their support staff before optimization. This information is summarized in Table 19. The three types of support staff that were considered to provide direct support to the providers were the nurses, medical technicians, and administrative technicians. They were summed to determine the "support staff per PCM". All types of support staff increased significantly with the start up of PCO. Administration technicians, however, increased more proportionally than the other support staff.

All staff members were also asked to report their self-perceptions of support. They were asked if their treatment teams had two medical technicians per provider, etc. Table 20 reports the responses of the providers who returned the survey. Over 70% of the providers reported that they had at least  $\frac{1}{2}$  nurse per provider. Over 50% reported that they had two medical technicians per provider. Less than half of the providers reported that they had at least 1 administrative technician per provider. Forty-five percent of the providers stated that their team received additional manning as a result of PCO.

Overall treatment team satisfaction was determined by averaging the satisfaction in five areas: technician support, nursing support, medical record availability, treatment team interaction, and treatment teamwork and support (Table 2). Staff members were satisfied with their treatment teams and recorded an increase in satisfaction with PCO (Table 21). Physicians and clinical nurses related higher increases in satisfaction in this area than other team members. Group practice managers rated the change in satisfaction lowest.

Providers were asked in their satisfaction surveys about their satisfaction with technician and nurse support. They were also asked about their satisfaction with the availability of medical records when caring for patients. Tables 22-24 summarize their satisfaction in these areas. Providers responded with neutral satisfaction with technician support, but this satisfaction had increased with the onset of PCO. Nurse practitioners were less satisfied with technician support than the other providers. Providers were more satisfied with nursing support than with technician support. They were satisfied with the support, and their satisfaction had increased over the year. Nurse practitioners, once again, responded less positively to this facet of satisfaction. All providers were dissatisfied with medical record availability, but their satisfaction increased a small amount with PCO. There may not have been any change in satisfaction in this area as the increase in satisfaction was not statistically significant.

The entire staff was asked about their satisfaction with treatment team interaction and support from other team members (Tables 25 and 26). Overall satisfaction was high and increasing for both of these facets of satisfaction. All types of staff members rated their satisfaction in these areas above neutral. The nurse practitioners' rating was not far

enough above neutral to be statistically significant. Group practice managers rated the change in these areas lower than the other staff members.

Satisfaction with the treatment facility, equipment and supplies.

Administrators were asked in the Extent of Change survey to disclose the number of patient examination and treatment rooms that each optimized provider had before and after PCO. This information is summarized in Table 27. Administrators reported a 25% increase in the number of patient care rooms per optimized provider. Staff members were also asked how many patient care rooms they currently had and if they received more patient care rooms with the implementation of PCO. Self-reported data were similar to, but lower than, data reported by the administrators. Thirty-six percent of those surveyed stated that they had received more patient care rooms following the implementation of PCO.

Overall satisfaction with facility support was evaluated using four questions on the staff satisfaction survey: satisfaction with examination rooms, satisfaction with clinic layout, satisfaction with equipment, and satisfaction with supplies. The staff, as a whole, reported satisfaction with this area and increasing satisfaction with the implementation of PCO (Table 28). Group practice managers and health care integrators rated the area the highest. Providers, especially physicians and nurse practitioners, reported increases in satisfaction in the area with PCO.

Tables 29 through 32 list the staff satisfaction in the four facets of facility support. On average, all members of the staff were satisfied with the number of examination and treatment rooms utilized by their teams. This satisfaction increased with the onset of PCO. Staff members were less satisfied with the layout of the clinic to maximize

efficiency, although physicians and health care integrators reported that their satisfaction increased with PCO. Clinical nurses were least satisfied in this area. Overall satisfaction with equipment in the optimized clinics was neutral and was not changed with PCO. Physicians and clinical nurses, however, were dissatisfied with the equipment. Conversely, health care integrators were satisfied with equipment. Both the group practice managers and health care integrators reported that their satisfaction with equipment had increased with the onset of PCO. Satisfaction with the availability of supplies was the lowest rated facet of satisfaction in the area of facility support. Providers and clinical nurses were less satisfied with the availability, while group practice managers and health care integrators were more satisfied. Primary care optimization did not appear to have an effect on this facet of satisfaction.

Satisfaction with practice autonomy.

Overall satisfaction with autonomy was evaluated with three questions on the staff satisfaction survey: patient care autonomy, process autonomy, and scheduling autonomy (Table 2). The staff was satisfied with overall autonomy, but PCO did not appear to have an effect on this satisfaction (Table 33). Physician assistants and nurse practitioners related the lowest satisfaction in this area. Group practice managers and health care integrators had the highest satisfaction and highest increase in satisfaction.

Tables 34-36 detail staff satisfaction with specific aspects of autonomy. Providers were satisfied with their ability to provide patient care according to their best judgment. This satisfaction did not appear to be affected by PCO (Table 34). Overall the staff was also satisfied with their ability to initiate changes in the way their work was performed. This satisfaction, again, did not appear to be effected by PCO (Table 35). Health care

integrators, group practice managers, and medical technicians were the most satisfied with their practice autonomy, the providers were less satisfied. Physicians, however, did indicate an increase in satisfaction in this area following the implementation of PCO.

Satisfaction in the ability to make changes to the schedule showed the most division between team members in this area of satisfaction. Overall the staff was satisfied in their ability to change the schedule, but did not indicate an increase in satisfaction in this area with PCO (Table 36). Providers had a neutral satisfaction in this area while all other types of workers were satisfied. Group practice managers and health care integrators had the highest satisfaction. They not only rated their satisfaction high, but also reported an increase in satisfaction with PCO. Medical technicians were the only group that rated their satisfaction with scheduling as decreasing with PCO.

#### Satisfaction with the organization.

The staff's satisfaction with the organization was determined by three questions on the Staff Satisfaction Survey: satisfaction with primary care emphasis, satisfaction with the local leadership, and satisfaction with the Air Force leadership (Table 2). Overall, the staff was satisfied with their organization and leadership. This satisfaction did not change with PCO (Table 37). The staff was generally satisfied with the emphasis that the local medical leadership placed on primary care. This satisfaction also increased as a result of the implementation of PCO (Table 38). Group practice managers and health care integrators were the most satisfied members of the staff; physicians and physician assistants were the least satisfied. The staff was also satisfied with the local medical leadership, but there did not appear to be an increase in this satisfaction following the implementation of PCO (Table 39). All types of workers were satisfied with the local

medical leadership except for the nurse practitioners, who had neutral satisfaction in this area.

Satisfaction with the Air Force medical leadership was significantly different than satisfaction with the local medical leadership. While the PCO staff reported satisfaction with the local medical leadership, they reported neutral satisfaction with the Air Force leadership. They also reported that their satisfaction decreased following the implementation of PCO (Table 40). Providers, especially physicians and nurse practitioners, were dissatisfied with the Air Force medical leadership. Administrative technicians and health care integrators were satisfied with the leadership. Almost the entire front-line team reported a decrease in satisfaction with the Air Force medical leadership following the implementation of PCO. The administrative technicians, group practice managers, and health care integrators reported no increase or decrease in satisfaction with the leadership.

Satisfaction with professional experience.

Staff satisfaction with their professional experience was measured using five facets of satisfaction: consultant interaction, professional interaction, teaching opportunities, training, and scope of practice (Table 3). Overall the staff reported to be satisfied in this area with no change in their satisfaction due to PCO (Table 41). Group practice managers and administrative technicians were least satisfied, health care integrators most satisfied (Table 41). Physicians reported a decrease in their satisfaction following PCO; medical technicians had an increase.

Providers were questioned about their satisfaction with their interaction with consultants. They indicated that they were satisfied and that their satisfaction increased

slightly during the implementation of PCO (Table 42). The PCO providers and nurses were also asked about their satisfaction with their ability to discuss interesting cases with other professionals. Once again, they indicated satisfaction, but implementation of PCO did not have an effect on the satisfaction. Clinical nurses, however, reported an increase in satisfaction following PCO (Table 43). One area of professional activities that providers showed a decrease in satisfaction was in participation in teaching activities (Table 44). Physicians in particular responded with dissatisfaction in this area. Nurse providers reported the largest decrease in satisfaction in participation in teaching activities.

The entire staff was asked about their satisfaction with the training they received to care for patients efficiently. Overall, they reported to be satisfied with their training and to have an increase in satisfaction following PCO implementation (Table 45). Group practice managers had the lowest satisfaction in this area. Medical technicians had the greatest change in satisfaction following PCO. The PCO staff also reported to be satisfied with their scope of practice, although this facet of satisfaction did not increase with PCO (Table 46). Physicians and administrative technicians had the lowest satisfaction with their scope of practice. Physicians and nurse practitioners also reported a decrease in their satisfaction with their scope of practice following implementation of PCO. Medical technicians reported increased satisfaction with their scope of practice.

#### Satisfaction with patient relationships.

Three facets of satisfaction were used to measure staff satisfaction with patient relationships: patient appreciation, contribution to the lives of the patients, and current relationships with the patients (Table 3). Overall, the staff reported satisfaction with their

patient relationships and an increase in this satisfaction following the implementation of PCO (Table 47). This satisfaction was noted through all types of staff members on the team, but especially among the health care integrators and providers. Satisfaction with patient appreciation was apparent through all types of staff. They also expressed an increase in satisfaction in this area following the implementation of PCO (Table 48). The change in satisfaction was not as high as the overall satisfaction, especially among nurse practitioners and group practice managers, who noted no change in their satisfaction following PCO.

The treatment team members also reported to be satisfied with their contribution to the lives of the patients and had a significant improvement in this satisfaction following PCO (Table 49). The administrative technicians had the lowest satisfaction in this area. The providers did not report as much of an increase in satisfaction in this area as did the other members of the team. Health care integrators, medical technicians, and clinical nurses reported the greatest increase in satisfaction in their contribution to the lives of the patients. Providers were also queried about their current relationships with their patients. They reported satisfaction (greater than 5 from all types of providers) and an increase in satisfaction following PCO (Table 50). The increase in satisfaction was small compared to overall satisfaction, but it was significant for all providers except for nurse practitioners.

Satisfaction with treatment team efficiency.

Clinic administrators on the Extent of Change Survey were asked to report on six types of tools to maximize provider productivity. They stated if the tools were used to support the optimized providers before and after optimization. Table 51 summarizes

their responses. All six tools were utilized to a greater extent following PCO implementation. Nurse triage was utilized to the greatest extent (77% of the optimized clinics). Dictation support was utilized to the least extent (24% of the optimized clinics). Coding support and charting support had the greatest percentage increase with the introduction of PCO.

Staff satisfaction with treatment team efficiency was measured using three facets of satisfaction: efficient use of patient time, efficient use of providers, and overall efficiency (Table 3). Overall, the staff was satisfied with their efficiency and reported an increase in satisfaction following PCO (Table 52). Providers were least satisfied in this area, with physicians and nurse practitioners both reporting dissatisfaction. Health care integrators, nurses, and medical technicians reported the greatest increase in satisfaction following PCO.

Satisfaction with the efficient use of patient time was neutral for the staff, but the satisfaction increased with the implementation of PCO (Table 53). Providers, especially physicians, were the least satisfied in this area and reported the least increase in satisfaction. Providers on PCO teams reported significant dissatisfaction with the amount of time that they spend in activities not related to patient care. Their satisfaction in this area also decreased with the implementation of PCO (Table 54). Nurse practitioners were particularly dissatisfied in this aspect, with a score less than 3. As a whole, staff members were satisfied with overall treatment team efficiency. They also reported a significant increase in satisfaction in this area following PCO (Table 55). Providers reported neutral satisfaction in this area, but all other staff members reported to be

satisfied. Most of the staff, including the providers, stated that their satisfaction in this area improved with the advent of PCO.

Satisfaction with quality of medical care provided.

Overall satisfaction with the quality of medical care provided was determined by averaging the scores on four facets of quality of care: satisfaction with population health data, satisfaction with the amount of time available to care for individual patients, satisfaction with the continuity of care, and satisfaction with overall quality of care (Table 3). The staff reported being somewhat satisfied with the quality of medical care and that their satisfaction increased with PCO (Table 56). Providers were less satisfied with the quality of care than the other staff members. Health care integrators had the largest increase in satisfaction in this area.

Overall, the staff was slightly satisfied with the quality of the population health data that they receive. This satisfaction increased with PCO (Table 57). Providers, especially physicians, were dissatisfied with the data, but they reported that their satisfaction increased. Medical and administrative technicians were most satisfied with the data available to them. Providers were also dissatisfied with the amount of time that they had to provide medical care for each of their patients. Table 58 shows that their satisfaction in this area had also decreased significantly after the implementation of PCO.

The staff, as a whole, was satisfied with the continuity of care that they deliver to their patients. They also indicated that this satisfaction increased significantly with the implementation of PCO (Table 59). All types of workers reported satisfaction in this area except nurse practitioners, who reported neutral satisfaction. All types of employees also reported a significant increase in satisfaction in this area. Satisfaction with the overall

quality of medical care provided was noted in the staff. They also reported a significant increase in satisfaction in this area (Table 60).

Satisfaction with pay, recognition, and advancement opportunities.

Staff satisfaction with compensation was evaluated using three facets: pay, prospects for promotion, and recognition (Table 3). The staff was neutral in their satisfaction with compensation, and this satisfaction decreased with PCO (Table 61). Providers were less satisfied with their total compensation. Medical technicians and administrative technicians had the largest decrease in satisfaction following PCO. The staff as a whole was satisfied with their pay, but this satisfaction decreased with the advent of PCO (Table 62). Officers were satisfied with their pay, especially health care integrators. Physicians were the least satisfied group of officers, with neutral satisfaction. Enlisted members were less satisfied with their pay than officers. Health care integrators, group practice managers, and clinical nurses related an increase in satisfaction with their pay following PCO. Medical technicians had a decrease in their satisfaction. Providers also tended to have a decrease in their satisfaction with pay, but this difference was not statistically significant.

The staff, as a whole, was satisfied with their prospects for promotion, but this satisfaction decreased with the implementation of PCO (Table 63). Nurse practitioners and administrative technicians were the least satisfied groups in this area. Health care integrators and group practice managers were the most satisfied groups. Clinical nurses thought that their prospects for promotion decreased with PCO. The staff expressed dissatisfaction with opportunities for recognition and awards. This dissatisfaction increased with the advent of PCO (Table 64). Medical technicians and administrative

technicians were the most dissatisfied with this factor. Health care integrators and group practice managers were the most satisfied.

Overall staff satisfaction.

Overall staff satisfaction was measured directly using one question: what is your overall satisfaction with your current position. To gage retention, the staff was also asked how likely they were to separate from the military at their next opportunity. The change in satisfaction following the implementation of PCO was measured with four questions: the change in attitude on the two questions above, would you do it again, and would you recommend it to a friend (Table 4). Overall, the staff members expressed satisfaction with their current position and a neutral change in satisfaction following the implementation of PCO (Table 65). Physicians and administrative technicians were the least satisfied. Health care integrators and group practice managers the most satisfied. The staff as a whole, expressed a neutral desire to separate at the next opportunity, with less of a desire to separate following PCO (Table 66). Physicians were far more likely to want to separate than the other types of workers. Health care integrators, group practice managers, and clinical nurses were much less likely to want to separate from the military. All types of workers on the PCO teams stated that they would accept the position again if offered and that they would recommend the position to a friend (Table 67). Administrative technicians had the lowest scores on these questions. Averaging the four direct questions related to a change in satisfaction due to PCO, they related that their satisfaction increased overall following the implementation of PCO (Table 68). Administrative technicians and nurse practitioners reported the lowest scores in this area, reporting neutral change in overall satisfaction. Health care integrators, group practice

managers, clinical nurses, and medical technicians had the highest increase in satisfaction following PCO.

### Inferential Statistics

Eighty different factors were identified from the extent of change survey and the staff satisfaction survey that could impact on the satisfaction of the staff. These factors were then grouped into categories of variables. The first group of variables, listed in Tables 69 and 70, are variables that measure individual characteristics like age, gender, etc. The second group of factors is variables concerned with the medical treatment facility and its location (Table 71). Manpower support factors were divided into two groups of variables, those obtained from the extent of change survey (Table 72) and those obtained from the staff satisfaction survey (Table 73). Facility support variables are listed in Table 74 and contain measures such as examination rooms per provider. The amount of time that a staff member spends in support of optimized teams and the type of work they do makes up a group of variables called staff duties and activities (Tables 75-77). Table 78 includes workload indicators such as enrollees per provider and hours worked per week. The last group of factors is called efficiency tool usage and is listed in Table 79.

Using SPSS, these 80 factors were correlated with four of the ten satisfaction domains: satisfaction with workload, satisfaction with treatment team, satisfaction with treatment team efficiency, and satisfaction with compensation. Workload and compensation were chosen in an effort to understand possible causes of dissatisfaction in these two lowest rated domains. Treatment team and efficiency were chosen to better understand causes behind these satisfaction domains that were significantly affected by

PCO. Q 71 Overall Satisfaction with current position in military medicine, Q 75 Desire to continue in the military, and Change in overall satisfaction with military primary care were also analyzed with Pearson correlations and Stepwise Multiple Linear Regression to better understand the root causes behind overall staff satisfaction (Table 4). Questions 71 and 75 were split in the analysis because, in the test for internal reliability, Chronbach's Alpha was only .61. This indicated that the staff members saw the questions as two separate issues. For overall satisfaction, an analysis was performed on the staff as a whole and on physicians separately.

#### Staff satisfaction with workload.

Thirteen factors were found to be positively correlated with overall staff satisfaction with workload (Table 80). The factor most closely correlated to satisfaction with workload was the individual's position on the PCO team. This variable was coded: Provider = 1, Nurse = 2, Medical technician = 3, Administrative technician = 4, Group practice managers = 5, and Health care integrators = 6. The positive correlation indicated that group practice managers and health care integrators were more satisfied with their workload than were the providers (Table 16). Five of the 13 factors pertained to manpower support. Nursing, administrative, and medical technician support were all related to higher satisfaction with workload. Activities that were related to higher staff satisfaction in this area included patient education, residency training, and staff training. Clinical preventive services support and coding support were positively correlated with satisfaction in this domain. Providers who were academy graduates and staff members assigned to a base within the continental US were also more satisfied with their workload.

The seven factors found to be negatively related to overall staff satisfaction with workload are listed in Table 81. Hours worked per week and the change in the hours worked per week were the two highest rated negative factors. Type of employee was coded: 1 = contractor, 2 = civil servant, 3 = military enlisted, and 4 = military officer. Negative correlation with the type of employee indicated that contractors and government service employees were more satisfied than active duty personnel. Type of provider was coded: 1 = medical doctor, 2 = doctor of osteopathy, 3 = nurse practitioner, and 4 = physician assistant. The negative correlation showed that physicians were more satisfied with their workload than physician assistants and nurse practitioners. Older staff members were also less satisfied with their workload as indicated by the negative correlation with age. Activities that were related to lower satisfaction with workload included administration and outpatient care.

Table 82 shows the results of the stepwise linear regression for overall satisfaction with workload in the PCO teams. The best model from the regression had a coefficient of determination of .180 and was highly significant. The coefficient of determination is the shared variance, or the amount of variance in the dependent variable that is accounted for by variance of the independent variable. Hours worked per week and percent of time in administration were both negatively related to satisfaction with workload. Figure 2 illustrates the effect of hours worked per week on overall satisfaction with workload. The greatest satisfaction was noted from staff members who worked 35-40 hours per week. The satisfaction dropped off for staff members who worked more or less than this amount. Satisfaction with workload decreased the most at about 50 hours per week and 65 hours per week. Activities in administration were related to lower satisfaction with

workload, while activities in patient education were related to higher satisfaction in this area. Clinical preventive services support and nursing support were also related to increased satisfaction. Male workers were significantly more satisfied than females. The staff position was also significant in the regression model.

Staff satisfaction with the treatment team.

Nineteen of the 80 variables considered in this study were positively correlated to staff satisfaction with the treatment team (Table 83). Out of the 19 variables, 8 were related to manpower support. Manpower support variables also had the highest Pearson correlations, filling 5 of the top 7 spots on the list. All types of manpower support were related to satisfaction with the treatment team except for group practice manager support. Increased productivity was also positively related to this satisfaction domain, both self-reported productivity and productivity as reported by the administrator. Three variables of facility support were also found to be important for satisfaction with the treatment team. Activities that were related to satisfaction in this area included patient education and staff training. Coding support and nurse managed clinics were two efficiency tools that were related to satisfaction with the treatment team.

Factors that were negatively related to overall staff satisfaction with the treatment team were headed by the change in the number of hours worked per week and the total number of hours worked per week (Table 84). An increase in the percent of time spent in military activities was also related to decreased satisfaction with the treatment team. Contractors and government service employees were more satisfied with the treatment team than military personnel.

A stepwise multiple linear regression on overall satisfaction with the treatment team resulted in a model with six variables, a coefficient of determination of .147 and a p-value of .000 (Table 85). Nearly 15% of the variance in overall satisfaction was explained by the six variables utilized in the model. Medical technician and nurse manning were both significantly related to satisfaction with the treatment team. Activities involving patient education were also related to increased staff satisfaction in this area. Coding support was the only efficiency tool that was significant, increasing satisfaction with the treatment team.

Staff satisfaction with treatment team efficiency.

Fifteen variables were found to have a positive correlation with treatment team efficiency (Table 86). The individual's position on the staff was the most significant factor, with a correlation of .167. This indicated that group practice managers and health care integrators were more satisfied with treatment team efficiency than providers (Table 52). Manpower support factors accounted for five of the significant variables, and three of the top six variables. Nurse, medical technician, and administrative technician support were all positively related to satisfaction with treatment team efficiency. Patient education and staff training activities were also correlated with satisfaction with efficiency. Facility support correlated positively with satisfaction with overall efficiency in three areas: the number of examination rooms, the number of treatment rooms, and the provision of additional patient care rooms with the implementation of PCO.

Five factors were identified with Pearson correlations to be negatively related to satisfaction with treatment team efficiency (Table 87). Hours worked per week, and the change in the number of hours worked per week were the number 1 and number 3

variables respectively. Type of employee was the number two factor, indicating that contractors and civil service employees were more satisfied with treatment team efficiency than military personnel. The activity that was negatively related to satisfaction with efficiency was outpatient care. The utilization of nurse triage was also negatively related to satisfaction with treatment team efficiency.

Multiple linear regression resulted in a model with a coefficient of determination of .138, and a p-value of .000 (Table 88). Nine factors were identified in the model as being significant to predict satisfaction with treatment team efficiency. Patient education and staff training were again identified as important activities. Nurse support was the second most significant factor. The number of patient care rooms available for the treatment team was also found to be significant. Military staff members were less satisfied than contractors and civil servants. Males were more satisfied than females. The only negative correlation in the model was the change in the number of hours worked per week.

#### Satisfaction with compensation.

Pearson correlations of the 80 independent variables against overall satisfaction with compensation in the Air Force PCO teams revealed 13 factors to be positively correlated (Table 89). Unlike other satisfaction domains, in regard to satisfaction with compensation, the type of employee was positively related. Figure 3 demonstrates that, in actuality, civil servants had the lowest satisfaction in this area, followed by enlisted members, officers, and contractors. Age and experience in medicine were also associated with satisfaction with compensation. Manpower support was found to be important in satisfaction with compensation, including administrative support, nursing support, health

care integrators, and group practice managers. Dictation support was noted to be positively related to satisfaction with compensation, as was the change in dictation support.

Four variables were found to be inversely related to overall satisfaction with compensation (Table 90). Productivity was the most important variable with a Pearson correlation of -.197. As productivity increased, satisfaction with overall compensation decreased (Figure 4). The decrease in satisfaction was greatest at 130 patients per week. Hours worked per week was also negatively related to satisfaction with compensation. The two activities that were inversely related to satisfaction with compensation were outpatient care and research.

Stepwise multiple linear regression resulted in a model for satisfaction with compensation that had a coefficient of determination of .088 (Table 91). Six variables were used in the model. Employee factors comprised three of the six factors. The type of employee, staff position, and age were all positively related to satisfaction. The change in dictation support was also related to increased satisfaction. The only inverse relationship found to be significant in the linear regression was the change in the number of hours worked per week. Staff members who worked the same number of hours per week or less were satisfied with their compensation. Those who worked more than before PCO had increasingly less satisfaction the more they worked (Figure 5).

#### Overall staff satisfaction.

Sixteen of the 80 factors were found to be significantly correlated with the staff's overall satisfaction in a positive manner (Table 92). Type of provider had the highest correlation, indicating that nurse practitioners and physician assistants were more

satisfied than physicians (Table 65). The staff position was also significantly related to satisfaction, with group practice managers (GPMs) and health care integrators (HCIs) being more satisfied than providers. Percent of time in patient education, staff training, and military activities were staff activities that were related to increased overall satisfaction. Self-reported support was also found to be positively related to overall satisfaction. Nursing, health care integrators, group practice managers, and additional manning with the implementation of PCO were correlated to increased satisfaction. Additional patient care rooms related to increased satisfaction. Older staff members and staff members who were contractors were also related to increased satisfaction.

Ten separate factors were found to be negatively related to overall satisfaction (Table 93). Four of the ten significant factors were from the workload indicators group. The two most significant factors involved the hours per week that the staff member worked. Both the total hours worked per week and the change in the number of hours worked per week were related to lower staff satisfaction. Three efficiency tools were found to be negatively related to overall staff satisfaction: nurse triage, charting support, and nurse managed clinics. The percentage of time spent in outpatient care was also negatively related to staff satisfaction.

A stepwise linear regression was performed using these variables. Table 94 shows the results of the regression. The regression resulted in a model that had a coefficient of determination of .055 and a p-value of .000. Four variables were found to be significant using this tool. Type of employee was negatively related to overall satisfaction, indicating that contractors and civil servants were more satisfied than military personnel. Figure 6 breaks out the overall satisfaction in the four groups of

employees. Contractors had the highest satisfaction, followed by civil servants, military officers, and, last, military enlisted. Total experience in federal medicine was positively related to satisfaction. Figure 7 demonstrates that satisfaction is lowest at 5-10 years of military service and then increases gradually until 25 years of federal medical experience, when it increases substantially. The change in the amount of time that a staff member spends in staff training was also found to be significantly related to satisfaction. Individuals who had more time to spend in staff education were, on average, more satisfied. Staff members who claimed that their teams had at least  $\frac{1}{2}$  nurse for each of their providers had higher satisfaction than those staff members who denied such nursing support. The teams with nursing support had a mean satisfaction of 4.2, those did not have nurse support had an average overall satisfaction of 3.8 (Appendix F).

The change in overall satisfaction for the PCO team members was found to have 19 factors that were positively related to it (Table 95). Eight of the factors were related to manpower support. Four of the top six variables were self-reported manpower support. Facility support was also important with 3 significant factors positively correlated with change in staff satisfaction. Patient education, staff training, and military activities were all associated with increased change in satisfaction.

Nine negative correlations with the change in overall staff satisfaction were noted on the correlation analysis (Table 96). Three of these were workload indicators: hours worked per week, the change in hours worked per week, and the change in the number of enrollees per provider. High administrative duties and increasing administrative duties were both related to decreasing staff satisfaction. In enlisted members, the enlisted rank was correlated with decreasing satisfaction. Gender was also negatively correlated with

change in satisfaction, indicating that females (coded 0) were more satisfied with the change than males (coded 1).

The linear regression for change in overall staff satisfaction resulted in a model with a coefficient of determination of .222 and a p-value of .000 (Table 97). This model explained over 22% of the variation in satisfaction with eleven independent variables.

The change in the hours worked per week and the change in the number of enrollees per provider were both negatively related to the change in satisfaction in the final model.

The change in the hours worked per week showed a significant downward trend when plotted against the change in satisfaction (Figure 8). Percent of time in administration was also negatively related, as was the gender of the staff member. Female staff members were more satisfied with an average score of 4.43 verses males who averaged 4.17 on this measure (Appendix G). Two efficiency tools were noted to be related to increased satisfaction: charting support, and nurse managed clinics. Two manpower factors were also related to increased staff satisfaction: group practice managers per provider, and administrative technicians per provider. Staff training and patient education were both activities that were related to increased staff satisfaction.

The desire to continue in the military was also analyzed using Pearson's correlation and stepwise multiple linear regression. Table 98 shows the positive correlations for the entire staff. Individual characteristics had the biggest impact on desire to continue in the military. Age, experience in medicine, and experience in military medicine were the top three correlations. Staff position was important, with health care integrators and group practice managers being more desirous to remain in the military than providers. Enlisted rank also had a positive correlation with desire to

continue in the military. Patient education, staff training, and administration were the activities that were positively related with desire to continue in the military. Manpower support played a role as well: nurses and health care integrators were both associated with greater desire to continue in the military. Having adequate facilities to provide medical care also played a role in the staff's desire to continue in the military.

Table 99 lists the factors that were negatively correlated with desire to remain in the military. Workload indicators were represented the most in this list. Hours worked per week, change in hours worked per week, enrollees per provider, and change in enrollees per provider were all related to a decreased desire to continue in the military. The number one correlation, an activity variable, was the percent of time in outpatient care. Three efficiency tools were also correlated negatively with desire to remain in the military. Charting support, change in charting support and nurse managed clinics were all associated with a lower desire to continue in the military. Unlike enlisted rank, which was positively correlated with this characteristic, officer rank was inversely related. Contractors and civil servants were also more likely to want to continue in the military than active duty personnel.

The stepwise multiple linear regression resulted in a model with five variables that were significant (Table 100). The coefficient of determination for the model was .088 with 5 degrees of freedom and was highly significant ( $p < .000$ ). Most of the factors that were negatively related to desire to continue in the military were not significant when all factors were considered together. Staff position was the most significant factor, showing the HCIs and GPMs are more likely to continue than are providers. Older staff members were also more likely to continue in the military. Nursing support also was found

to be important. The percent of time that the staff member spent in staff training was positively related to a desire to continue in the military, but the percent of time in administration was negatively related.

Physician overall satisfaction.

Seven variables were found to be positively correlated to overall physician satisfaction on the PCO teams (Table 101). Of these, three were related to manpower support. Self-reported administrative and nursing support were both related to higher physician satisfaction. Additional manning with the implementation of PCO also was related to increased satisfaction. Experience appears to play an important role in overall satisfaction. Both experience in federal medicine and experience in medicine were related to increased overall satisfaction. Figure 9 demonstrates that physicians with less than 5 years of experience had the lowest satisfaction. Physicians with over 20 years of experience had the greatest satisfaction. Of the efficiency tools, only dictation support was related to overall satisfaction in physicians.

Two factors were found to be negatively related to physician satisfaction on PCO teams (Table 102). Facility utilization of nurse triage to screen patients for the need for urgent appointments was negatively related to overall physician satisfaction. Type of employee was also negatively correlated indicating that contractors and government service physicians were more satisfied than military providers. Contractor physicians had an average satisfaction of 5, government service physicians, 6.5 and military physicians, 3.71 (Appendix H).

The stepwise linear regression for overall physician satisfaction developed a model that had a coefficient of determination of .281, and a p-value of .000. Five

variables were included in the regression model (Table 103). Four factors were positively related to satisfaction: additional patient care rooms, charting support, administrative support, and medical school training from the Uniformed Services University of the Health Sciences. Of the four positive factors, administration support had the largest effect on satisfaction. The mean satisfaction for those physicians who stated that they did not have administrative support was 3.4. For those physicians who had administrative support it was 4.1. The other variables were statistically significant, but did not have as large of an impact (Appendix I). One factor was negatively related to satisfaction, the change in the number of enrollees per provider.

Fourteen factors were found to be positively related to the physician's change in overall satisfaction (Table 104). Four of the fourteen variables were related to manpower. Administrative support, nursing support, medical technician support, and additional manpower support with the implementation of PCO were all related to increased physician satisfaction. Physician activities that were related to increasing satisfaction included military activities, staff training, and residency training. The number of patient treatment rooms per provider was also positively related to the change in their satisfaction. Two efficiency tools were related to an increase in physician satisfaction: coding support and nurse managed clinics. Only two factors were found to be negatively related to the change in physician satisfaction: hours worked per week, and the change in the number of hours worked per week (Table 105). Figures 10 and 11 show the relationship between workweek and the change in satisfaction.

Multiple linear regression on the change in overall satisfaction in physicians resulted in 6 variables being used to create a model with a coefficient of determination of

.427, and a p-value of .000 (Table 106). Nearly 43% of the variability of the change in overall physician satisfaction could be predicted with 6 variables. The change in the hours worked per week was the most significant variable. Figure 11 demonstrates that physicians were satisfied when they worked the same number of hours or fewer, but were increasing unsatisfied when they worked longer hours. Manpower support was also important. Administrative support and medical technician support were both associated with increased physician satisfaction. Activities that were correlated with increased satisfaction included staff training and military activities. Dictation support was noted to be negatively related to satisfaction. It was, however, not significant on a Univariate Analysis of Variance (Appendix J). Of the dichotomous variables, administrative support seemed to be the most important. Providers without administrative support had a satisfaction of 3.81. Those with the support had an average satisfaction of 4.56 (Appendix K).

For physicians, the desire to remain in the military was strongly correlated to their age and experience (Table 107). Experience in medicine, experience in military medicine, officer rank, and age were all related to the physician's desire to remain in the military. Prior military training was also positively related to the desire continue in the military. ROTC graduation and USUHS medical training were both predictive of a greater desire to remain in the military. Activities that were associated with higher desire to remain in the military include residency training and military activities. Dictation support was the only efficiency tool that was positively related to physician retention. The MAJCOM to which the physician was assigned was also positively related to physician retention. Figure 12 displays the MAJCOMs and their physicians' desire to

remain in the military. Physicians assigned to bases overseas had higher desires to remain in the military than physicians in MAJCOMs that were in the continental US (Appendix L).

Several of the negative correlations were similar to the positive correlations (Table 108). Physicians who were assigned to the continental US were less likely to continue in the military than those serving overseas. Physicians who went through medical school on an HPSP scholarship were less likely to continue in the military than those who obtained their training in other manners. Active duty physicians were less likely to want to continue in military medicine than contractors. Self-reported productivity was also negatively related to a physician's desire to continue in the military.

Figure 13 displays physician desire to continue in the military stratified by outpatients seen per week. The biggest drop in satisfaction occurs at 50 – 70 patients per week.

Linear regression of the 80 independent variables against the dependent variable "desire to continue in the military" resulted in a model with 31% shared variance (Table 109). Military training at USUHS or ROTC was positively related to a desire to remain in the military. Percent of time in staff training was also related to physician retention. Additional patient care rooms and administrative support were the last two variables that were related to an increased desire to remain in the military. The model had a coefficient of determination of .311 and was highly significant ( $p$  of .000).

#### Patient Satisfaction

Of the 88 clinics identified on the extent of change survey as being optimized between 1 January and 1 September 2000, 59 were positively identified in the MHS database. The majority of the clinics that were not identified in the database were from

overseas locations where the monthly MHS survey is not utilized. SPSS was utilized to weight the results, and to calculate an average patient satisfaction for each clinic for the time period 1 September to 30 November 1999 and 1 September to 30 November 2000. These satisfaction averages were then entered back into SPSS in a paired fashion to look for a difference between the scores for each clinic before and after PCO. The results are listed in Table 110. Both overall satisfaction questions, overall satisfaction with clinics, and overall satisfaction with medical care increased slightly after the implementation of PCO, but this increase was not statistically significant. The quality average and the interpersonal relationship average also increased slightly with the implementation of PCO, but the access average remained unchanged. These differences were also found to not be statistically significant. Of the six facets of satisfaction in the access domain, three of the facets increased between 1999 and 2000, while three of them decreased. Office wait time, appointment wait time, and ease of making a telephone appointment were all facets of satisfaction that decreased. Of the three facets that increased in satisfaction, the referral for specialty care increased the most, but was still not found to be significant. All of the ten facets in quality and interpersonal relationship increased between 1999 and 2000. How much the patient was helped and how well the care met the patient's needs increased the most. None of these increases were found to be statistically significant.

Comparing the before and after statistics of the 58 clinics that were optimized between January and August 2000, there appeared to be a slight increase in patient satisfaction. The increase in satisfaction was mostly in the quality of care and interpersonal relations domains. Despite this apparent trend, none of the increases in satisfaction were statistically significant. For patient satisfaction, the null hypothesis

must be accepted, there is no difference in patient satisfaction with the implementation of primary care optimization.

### Discussion

#### Efficiency and Patient Satisfaction

Primary care optimization in the Air Force increased productivity in primary care clinics 21 to 37 percent, depending on how it was measured. This was expected, in that it was the main reason that the program was set up. Metrics were also set up at the Air Force level to track enrollment per provider and patients seen per day. These metrics were emphasized from the highest level and MTF commanders were encouraged to improve their performance in these areas.

Providers in the Air Force PCO teams reported seeing an average of 115 patients per week in 2000. This productivity compares favorably with civilian self-reported productivity. Guglielmo (1996) in his survey of office-based private practice physicians reported that family practitioners saw 114 outpatients per week, pediatricians saw 120 outpatients per week, internists saw 80 outpatients per week, and general practitioners saw 90 outpatients per week. Similarly, Preston (1999) reported average productivity of 120 outpatients per week for family practitioners, 121 outpatients per week for pediatricians, 90 outpatients per week for internists, and 93 outpatients per day for general practitioners. Both of these studies utilized self-reported data and therefore should be comparable to the self-reported workload data that was collected in this study.

An outcome that was not known was the effect that this emphasis on increased productivity would have on patient satisfaction. On one hand, it would seem that it would decrease patient satisfaction. Enrolling more patients to each provider could make

it more difficult for the patients to gain access to their providers. Nurse triage, which was utilized 67% more after the implementation of PCO, could make it more difficult for a patient to make an appointment when the patient feels that he needs the appointment. Greater through-put could also increase the office wait time for patients, or make it more difficult for patients to communicate with their providers on the telephone. In order to accommodate more patients per day, providers may need to schedule shorter appointments and spend less time with their patients during each appointment. Providers may not have as much time to explain their disease, the treatment, or the tests that have been ordered. Patients could perceive this as less thorough treatment or that the provider has less of an interest in them. DeBakker (1991) reported that patients who spent more time with their providers were more satisfied with the care they received. Of these possible effects, only three aspects of patient satisfaction with access were noted to decrease after PCO implementation. Office wait time, appointment wait time, and ease of making phone appointment all decreased, but the decrease was slight and was not statistically significant. No negative effects on patient satisfaction with quality of care or patient satisfaction with interpersonal relationships were found with the implementation of PCO.

The potential negative effects on patient satisfaction from increasing productivity in primary care providers possibly was mitigated by positive effects from the program. Before initiating the program, PCO teams were trained in how to operate more efficiently. The teams were encouraged to care for their patients as a team. They were then set up with a defined population and the requisite support staff. Facilities were not immediately given additional manpower or funding to implement PCO, MTF

commanders were encouraged to move staff internally to provide more support to the optimized providers until additional manpower authorizations could be generated two years later. Forty-five percent of the providers stated that they received more support staff than they had before optimization. This allowed them to spend more of their time providing patient care. Patients were also informed of the name of their provider, and their care team. For most patients this was a new concept. Primary care manager by name was not yet implemented in the Air Force when PCO was started.

The changes that occurred in PCO along with the increases in productivity would be expected to have a positive effect on several areas of patient satisfaction. Increased efficiency of providers would result in more appointment availability, a shorter office wait time, shorter appointment wait time, and shorter time to return calls if they were caring for the same number of patients. Nurses would help to make specialty referrals and return telephone calls. Patients having their own provider and a designated treatment team to manage their care tend to be more satisfied with their quality of care (Schmitt, 1997). If the treatment team knows their patients and treats them differently because of this increased familiarity, the patient may also perceive a greater personal interest and greater friendliness and staff courtesy.

The positive effects of PCO on patient satisfaction appear to have at least counteracted the negative effects, and may have resulted in increased overall satisfaction. The greatest positive effects appear to have been in quality of care and interpersonal relationship. It's interesting to note that these areas were also rated high on the staff satisfaction survey. Of the ten satisfaction domains, patient relations was rated first in

overall satisfaction and second in change in satisfaction. Quality of care was rated third highest in both overall satisfaction and in change in satisfaction (Table 111).

The effect of PCO on patient satisfaction was difficult to evaluate and may be the weakest aspect of the study. PCO is a new concept in the Air Force and most facilities had not optimized all of the providers in their clinics. Most of the clinics that were utilized in the study had only optimized a portion of their providers. Provider-level patient satisfaction data was not available for this study. Only clinic level data were available, which resulted in including many patients in the study who had not changed their care from non-optimized to optimized care. Because of this weakness in the study, a type two error may have occurred. A real change in patient satisfaction might have occurred which was not detected by the study.

#### Staff Satisfaction

#### Activity Analysis

The intent of primary care optimization was to provide more support for providers so that they could spend more time in patient care activities. The activity analysis was performed to quantify the extent to which this had occurred. It was surprising to learn that this program resulted in only .4% more of the providers' time being spent in outpatient care (Table 10). In fact, if total patient care is considered, there was a net *decrease* of nearly 1% of the provider's time being spent in combined inpatient and outpatient care. Staff training and administration activities both increased with the onset of PCO. Additional time in staff training may be a temporary issue with the start-up of a new program. The requirement for this training will probably decrease as the teams mature. An increase in administration duties, however, is difficult to explain. As

previously noted, administrators reported increasing support staff for the providers an average of 1.1 staff per provider (Table 19). Forty-five percent of providers themselves stated that they received additional support staff when PCO was implemented (Table 20). However, providers are continuing to use over 11% of their time on administration (Table 10). Some additional administration may be from having a larger team to lead. Job evaluations would need to be written for these additional staff members. There would also be additional paperwork to submit the staff for awards, decorations, and other recognition. The new program itself may have caused some additional administrative workload. But, even considering all of this, it is still surprising that providers were not able to delegate more of the administrative workload to the new staff members on their team. Providers who worked on PCO teams also stated that they spent less of their time in military-unique duties and in readiness. This was anticipated in that the teams were established to provide peacetime health care. They were not on mobility and did not fill readiness positions. Some providers may have been moved out of positions with a more important readiness role when they were selected for the PCO teams.

The staff, as a whole, spent significantly more of their time in administration and less of their time in patient care (Table 9). This is probably due to the makeup of the teams. Administrative technicians spend 60% of their time on administration, and only 12 to 14% of their time in patient care. Before PCO, the administrative technician made up 8.9% of the team. After PCO, this proportion increased to 17.9%. The percent of the staff's time spent in patient education also increased significantly. This may be due to some demand management functions such as nurse triage that were added in many locations with the institution of PCO. Clinical preventive services and the preventive

health assessment, both of which include significant patient education, were also managed within some of the care teams when in the past they were assigned to other functional areas. Group practice managers and health care integrators were both fairly new positions. Many of these individuals were probably in completely different types of jobs before the onset of PCO. The different role that the individuals played on health care teams was probably more important in the changes noted in their activities than the impact of PCO on their specific duties.

#### Satisfaction with Workload

PCO resulted in increased productivity. Providers were seeing, on average, 4 to 5 more patients each day. However, providers were still spending the same proportion of their time on outpatient care. In order to increase their outpatient productivity without decreasing their other duties, providers spent more time at work. On average, providers worked 2.2 to 4.9 more hours each week after optimization than before optimization (Table 8). Military physicians in this survey reported working similar hours as their civilian counterparts. Guglielmo (1996) reported that family practitioners and pediatricians worked an average of 52 hours per week, while general practitioners worked 50 hours per week. Preston (1999) reported that family practitioners and pediatricians worked an average of 55 hours per week, and general practitioners worked an average of 50 hours per week. The military physicians in this survey reported working 54.1 hours per week an increase from 51.9 hours per week before PCO. Optimization, however, not only resulted in longer work weeks for the providers, but for the entire team. Medical technicians reported working an additional 2.7 hours per week; administrative technicians, 2.4 hours per week; and nurses, 2.2 hours per week.

Considering the extra hours that staff members across the board were working, it is not surprising that the staff's satisfaction with workload was the lowest rated satisfaction domain (Table 111). This domain was one of only two that PCO seemed to have a negative impact on. Medical technicians and health care integrators were the only subsets of the staff that were satisfied with their workload, but both indicated a decrease in satisfaction. Staff satisfaction with the workload was most closely related to the hours worked per week (Table 82). This association was not entirely linear. Figure 2 demonstrates that the highest satisfaction was found among the employees that worked 35 to 45 hours per week. Working less than this amount resulted in a decrease in satisfaction. This may be due to there not being enough work to keep the individual interested. Working more than 45 hours a week resulted in a definite decrease in satisfaction. The biggest drop occurred at 50 hours per week. On average, employees who worked 50 hours or more per week were dissatisfied with their workload, while those who worked less than 50 hours per week were satisfied with their workload.

Gender was one factor that turned out as significant on the multiple linear regression while it was not significant when considered by itself. According to the model, male employees were more satisfied with the workload than female employees. Stratifying the data for gender showed that male satisfaction with workload was essentially the same as female satisfaction with workload, 3.99 (Appendix M). Females, however, worked on average 47 hours per week while males worked 49 hours per week (Appendix N). Males worked longer hours with the same average satisfaction with the workload.

Using one-to-one correlations, the type of employee was noted to be one of the most important factors affecting satisfaction with workload (Table 81). Figure 14 shows that government service employees were the most satisfied followed by contractors, military enlisted, and, finally, military officers. The type of employee was not found significant in the linear regression because of a significant relationship between the type of employee and the number of hours worked per week. Figure 15 demonstrates this relationship. Military officers worked on average 51 hours per week, enlisted worked 46 hours per week, civil servants worked 42.5 hours per week, and contractors worked 40 hours per week. The hours that each type of employee worked per week accounted for their satisfaction with the workweek.

#### Satisfaction with the Treatment Team

Satisfaction with the treatment team increased the most of any of the domains of satisfaction with the implementation of PCO (Table 111). Providers, clinical nurses, medical technicians, and health care integrators were all satisfied with the treatment teams and stated that their satisfaction with the teams increased with the implementation of PCO (Tables 112-119). Group practice managers also rated their satisfaction with treatment teams well, but related a decreasing satisfaction with the implementation of PCO. Unlike the other staff members, GPMs ranked this satisfaction domain ninth as far as the impact that PCO had on it. GPMs are different than other staff members in that they work with many different teams. Their drop in satisfaction with treatment teams may be due to observations of teamwork between teams as well as within teams. One GPM stated, "There is a morale problem in the MTF that has been caused by breaking out some primary care teams and giving them extra manpower. In many cases this extra

manpower came from other treatment teams. This has caused an 'us verses them' atmosphere"(Appendix O). This study did not analyze the attitudes and satisfaction of the staff members who were not members of PCO teams. As indicated by this comment, their satisfaction could be significantly different from the satisfaction of the team members. This would be a good area for future study.

Not surprisingly, the main factor that affected the satisfaction with the treatment team was the individual's perception of the adequacy of the treatment team. Nurses, medical technicians, and administrative technicians all provided direct support to the provider and were important to staff satisfaction with the team. Considered alone, nurses had the largest impact on satisfaction with the treatment team. Staff members who stated that their team did not have  $\frac{1}{2}$  nurse per provider had a score .64 lower than those staff members that stated that they did (Appendix P). Two medical technicians per provider resulted in a score .49 higher, while one administrative technician per provider increased the score .39. If all three support staff are considered simultaneously, the satisfaction without the support staff was 3.99 verses 4.91 with the staff. When only providers were considered in the satisfaction, the difference was greater: nursing support increased satisfaction .74; medical tech support, .88; and admin tech support, .73. Overall provider satisfaction with the treatment team increased 1.36, from 3.55 to 4.91, if all three positions were properly manned (Appendix Q). Unfortunately this was the case in only 93 of the 279 providers, 33%.

#### Satisfaction with the Treatment Facility, Equipment, And Supplies

Facility support was ranked fifth out of the ten satisfaction domains in regard to the impact of PCO upon the domain (Table 111). In regard to its level of satisfaction, it

was ranked eighth. Providers and group practice managers tended to rate the impact of PCO on facility support higher than the rest of the staff. This may be due to the process many facilities used to obtain more rooms for patient care. Many facilities converted technician and nurse offices into examination rooms and did not provide additional office space for the support staff. One nurse commented, "We have 2 exam rooms per provider, but no room for the nonproviders. We share offices, desks and bookcases. Space is a major concern!"(Appendix O).

Staff satisfaction increased with the layout of the clinic, but overall satisfaction was still neutral at best. This is not surprising considering the age of many of the facilities and the limited funds available for capital improvements. One GPM commented, "Our facility is the oldest in the Air Force. The layout of the clinics is grossly inefficient. Equipment that was needed to improve efficiency of the teams was requested last year but was not purchased – not enough money. We are still waiting on the equipment this year..." (Appendix O). An active duty physician wrote, "Currently PCMs have two exam rooms each. However, we have extra providers that don't have any exam rooms. They frequently share our two exam rooms. I feel like we are playing a shell game. We tell the senior leaders what they want to hear, but in reality it is business as usual." (Appendix O). This situation may explain why administrators reported more patient care rooms per optimized provider than the providers reported.

#### Satisfaction with Practice Autonomy

The staff as a whole is satisfied with the autonomy that they have in their jobs. Overall it is rated fifth out of the 10 satisfaction domains (Table 111). Considering the entire staff, the satisfaction in this area was effected greatly by PCO. Group practice

managers and health care integrators had higher satisfaction in this domain, and a greater increase in satisfaction with PCO. Most of this was due to their ability to make changes in their work schedule (Table 36). This is easily explained because of the nature of their duties. Their duties are not as closely associated with direct patient care as the other members of the team. They do not have to work time off and appointments around patient care, which is frequently scheduled far in advance. This is frustrating for many members of the patient care team. One medical technician stated, "Before PCO I was able to take leave at the drop of a hat because other team members were able to cover for me. Now I have to request leave one year in advance and if anything comes up, like a school play for my child, SORRY!! This is the reason I will separate from the Air Force after 9 years active duty." Other medical technicians, however had a different experience with PCO. One airman stated, "Everyone is pretty good at adjusting the schedule if necessary" (Appendix O).

#### Satisfaction with the Organization

Overall, the PCO staff was satisfied with their organization and leadership. The satisfaction in this area, however, was lower than most of the other domains. It was rated 8<sup>th</sup> out of ten domains as far as how it was affected by PCO (Table 111). Satisfaction with the local medical leadership was higher than satisfaction with the Air Force leadership. The satisfaction with the Air Force leadership was particularly poor among the team members that provided direct patient care (Table 40). Significant decreases in satisfaction were reported from providers, clinical nurses, and medical technicians. Among the medical technicians, satisfaction with AF medical leadership was inversely related to the rank of the staff member. One master sergeant stated, "This plan denigrates

the senior enlisted corps. I'm back to doing what I was doing 20 years ago" (Appendix O). Figure 16 illustrates the relationship between enlisted rank and satisfaction with AF medical leadership. Providers and nurses were frustrated about the difference between the program as outlined and the product that was implemented. "What we are doing here is very different than we were told it would be." They also complained about the lack of flexibility in implementing the program at their local bases. "The Air Force medical leadership won't listen when we tell them what we need to staff our clinic even though we are the 'benchmark' for PCO". The biggest complaint was the lack of manpower to implement the program. One operations support commander stated,

We do not have enough support staff to fully optimize all of our providers. We are told to optimize 2 or 3 providers out of the 8 providers that work side-by-side in the clinic. The only way we can optimize these providers is to suboptimize our other providers even further. If we direct the technicians and nurses on the optimized teams to only support their providers we lose teamwork in the clinic and the morale suffers. I cannot tolerate this, but I can't suffer the heat from the MAJCOM to not optimize a few teams. Therefore, on paper it looks like we have optimized two teams, but in reality it is business as usual, only now we whip the staff to see more patients (Appendix O).

#### Satisfaction with Professional Experience

Satisfaction with professional experience was ranked fourth highest of the ten satisfaction domains. It was not, however, affected by PCO, and was ranked sixth in regard to the impact that PCO had on the domain (Table 111). Physicians expressed a decrease in satisfaction with their professional experience, ranking it 9<sup>th</sup> out of the 10

domains, with workload as the only satisfaction domain that was ranked lower (Table 112). The group practice managers ranked professional experience the lowest of all of the domains (Table 118). The facets of professional experience which physicians rated lowest were satisfaction with teaching activities and satisfaction with scope of practice. The physicians' satisfaction with scope of practice was inversely related to the number of enrollees assigned to each provider. Figure 17 demonstrates the relationship. Physician satisfaction dropped below neutral after empanelling more than 1100 patients per provider. Many physicians are pushed so hard to meet the 25 patients per day Air Force standard that they are not able to perform procedures or take care of complicated patients, even though they are trained to do so. One physician stated,

The focus is so much on access and seeing more patients with fewer providers that I dread seeing a complicated patient. I will more likely refer them out to the network even though, with sufficient time, I could manage the patient. Several providers here in the clinic have stopped doing procedures because they take so much time and decrease the volume of patients that we could see. These patients are referred out to the network (Appendix O).

#### Satisfaction with Patient Relationships

Satisfaction with patient relationships was the highest rated domain of the ten domains. The staff's satisfaction in this domain also increased considerably with the advent of PCO (Table 111). All types of team members had high satisfaction in this area. The increase in satisfaction seen on PCO teams with patient relationships is most likely due to empanelment of patients to teams. Before PCO, most patients did not have one provider that was their doctor. They called in to central appointments and got an

appointment with any provider that was available. After PCO, patients were assigned to a specific team and saw the same team every time they received care. This new system not only allowed the patients to get to know their treatment team, but also allowed their treatment team to get to know them. This increased staff satisfaction in this area. One medical technician stated, "It's a good thing to get to know the patients. They trust us more and are more friendly. It makes work more enjoyable." A physician stated, "The patients know me and my support team by name. I like that." (Appendix O). One aspect of PCO that received several negative comments by the nursing staff was nurse triage. One nurse commented, "Most of my time is spent in nurse triage where I am trying to keep patients from coming in to see their provider. This is sometimes confrontational and seldom rewarding."

#### Satisfaction with Treatment Team Efficiency

Satisfaction with treatment team efficiency was the seventh ranked satisfaction domain by the entire staff. It was ranked number four in regards to the effect that PCO had on the satisfaction. Providers were less satisfied with treatment team efficiency than the other members of the staff. The lowest rated facet of satisfaction in the domain was the providers' satisfaction with the amount of time that they spent in areas not related to patient care. One provider stated, "My administrative workload impacts on my ability to care for patients. OPRs, ADS, PRP, chart reviews, JCAHO, OIs, charting...". It also appears that Air Force metrics, intended to increase efficiency, had the reverse effect in some cases. One nurse stated,

Twenty-five patients per day is a ridiculous metric! In order to meet that standard we insist that each appointment be limited to one complaint. It is incredibly

annoying to the patient and the staff to schedule separate visits for unrelated problems.

Another example cited by a nurse:

The focus on patient counts causes providers to provide care less efficiently.

Frequently all that a patient needs to take care of his problem is a telephone consult, however, telephone consults are not counted as a patient visit. Many providers waste the patient's and the staff's time by having the patient come in to be seen so that they can get 'credit' for the visit (Appendix O).

Notable in its absence was the impact of efficiency tools on the staff's satisfaction with treatment team efficiency. Only one of the six efficiency tools reviewed by this study, coding support, was noted to be positively related to staff satisfaction with efficiency (Table 86). One tool, nurse triage, was negatively related to staff satisfaction (Table 87). The multiple linear regression showed that facility support and manpower support were more important to staff satisfaction with efficiency than the use of the efficiency tools (Table 88). This could be an interesting area of future study.

#### Satisfaction with the Quality of Medical Care Provided

Staff members were satisfied with the quality of medical care provided and stated that their satisfaction increased significantly with PCO. Overall, this domain was ranked third of all the satisfaction domains. Health care integrators and group practice managers ranked it highest of all of the domains. Providers were marginally satisfied in the domain. The providers were most concerned about the amount of time that they had to care for their patients. This facet of satisfaction was the lowest rated facet for the providers, lower than satisfaction with pace of work and satisfaction with the amount of

time spent outside of patient care. One physician commented, "I am concerned about the decrease in appointment time after PCO. I have much less time to deal with my patients. This will be an even bigger issue if more of my patients are over 65." Some staff members were also concerned about their lack of training for the new responsibilities that they assumed with PCO. One nurse commented:

Nurse managed clinics without proper training is my concern. The nurses here manage a cold clinic where we diagnose and treat patients. I have not been trained to accomplish this task, it is beyond my scope of practice (Appendix O).

Overall, however, the staff was satisfied with the quality of care provided. One nurse practitioner commented, "The overall medical care is improved when a patient is empanelled to one provider and is consistently seen by the same provider. The PCM concept has helped tremendously with this."

#### Satisfaction with Pay, Recognition, and Advancement Opportunities

Satisfaction with compensation was the ninth lowest area of satisfaction for Air Force PCO teams. The entire staff reported a neutral, but down-going satisfaction. The overall satisfaction result was surprising that it were not lower. Chung-Park (1998), in her study of Navy nurse practitioners, noted a satisfaction with pay of 3.56, significantly below the satisfaction of 4.07 reported by the AF PCO teams. Similarly, Allgood, et al. (2000) surveyed Army nurses and reported a satisfaction of 3.3 for pay. Another surprising finding was that the staff's satisfaction with pay was declining with the implementation of PCO. Since pay was not affected at all by PCO, this measure was expected to be unchanged. The decrease in satisfaction with pay following PCO was probably due to the increase in hours worked without a subsequent increase in pay.

Figure 5 demonstrates that when staff members worked the same number of hours per week they were satisfied with their pay. As they worked increasingly more hours, their satisfaction declined. One E5 medical technician put it this way, "Longer work hours, same pay, no overtime, additional costs for child care...". A physician stated,

What you need to realize is that family practitioners could make more money on the outside. What draws us to the military is comraderie and lifestyle (family time). For me, the lifestyle is what counts. Working 65-75 hours per week with 5 minute lunch hours is not a retainable situation.

The providers' productivity was inversely related to their satisfaction with compensation. Figure 4 demonstrates that the satisfaction remains near neutral until the productivity exceeds 130 patients per week. At that level, there was a large drop-off with their satisfaction with compensation.

The entire staff, and nurses in particular, thought that PCO would hurt their prospects for promotion. The concern was that they were so busy with patient care that they did not have time for additional duties that are required for awards and ultimate promotion. Younger staff members were also concerned that their supervisors were so busy with patient care that they would not have time to write award packages for them or good evaluations. One Captain nurse stated, "I think it will be difficult to be promoted from this position. When I am taking care of patients 10 hours per day it is difficult to find time for additional duties or career advancing courses." An administrative technician stated, "My supervisor is so busy with patient care that I am not put in for awards that I could possibly win. More work, less recognition." (Appendix O).

### Overall Staff Satisfaction

Overall the staff is slightly satisfied with their position in military medicine and this satisfaction increased following the implementation of PCO (Tables 65-68). The overall staff satisfaction score of 4.12 was similar to other surveys done in the military. Chung-Park, in 1998 surveyed Navy nurse practitioners using the same scale utilized in this study. She noted an overall satisfaction of 3.83. By comparison, the nurse practitioners in this study had an overall satisfaction of 4.29. Allgood (2000) also surveyed Army nurses using the same measurement scale. She noted an overall satisfaction of 4.1, exactly the same satisfaction that was reported by the clinical nurses in the study. Satisfaction was significantly different than reported in studies outside the military. Lichtenstein (1984) surveyed physician satisfaction among 382 physicians working in the US prison health program. Using the same measurement scale utilized in this study, he noted an overall satisfaction of 4.73. This was significantly above the physician satisfaction reported on the PCO teams, 3.73.

The key variable related to overall staff satisfaction was the hours that the staff member works per week, and the change in the number of hours worked per week following PCO. Figure 8 shows the inverse relationship between the change in the hours worked per week and the change in overall satisfaction. When staff members worked the same or less time they were satisfied, but when they worked longer hours they were dissatisfied.

Physician satisfaction was also strongly related to hours worked per week. Figure 10 shows that physicians working less than 55 hours per week were, on average, satisfied. Working over 55 hours per week led to decreasing satisfaction. Historically,

physician retention has been an issue for the Air Force. The study showed that it will continue to be a problem. Most physicians assigned to PCO teams are planning to leave the military at the next opportunity. Military experience, either through training at USUHS or through ROTC, was a significant factor related to physicians wanting to continue in the military. Workload indicators like enrollees per provider and hours worked per week were not correlated with this outcome. Despite this fact, many physicians took the opportunity to relate their decision to separate to their increased workload. One physician wrote, "PCO is a good concept, but we are enrolling at too high a level. I'm so busy taking care of my 1500 patients that I am getting burned out. I don't get paid enough for this. Good-bye." Another physician wrote,

Right now I get the feeling that primary care providers are viewed as resources to be used up – exploited. I predict that retention is going to be a huge problem in the AFMS. I am not at all unhappy with the local leadership. The vision at the Air Force SG level needs to be more realistic.

Another PA wrote, "The concept of optimization is a good one, but the implementation has been poor. It is driven by metrics forcing productivity before enabling productivity with increased support." These comments show the growing pains that some facilities are having with PCO. Other facilities, however, are having very good success. One physician wrote, "Overall PCO is a definite improvement in efficiency and support to me as a provider. Thanks." An administrative technician also commented, "I love the idea of PCO. I have never been more challenged in my AF career." Finally, a physician stated, "We are on the right track. We just need to stay the course, work through the adjustments, and stay focused." (Appendix O).

### Conclusion and Recommendations

Efficiency, staff satisfaction and, possibly, patient satisfaction increased following the implementation of an Air Force program 'primary care optimization' (PCO). Support staffing increased 62%, but was still below Air Force goals. Only 33% of 'optimized' providers had a full complement of support staff. Productivity increased 21 to 35% while enrollment increased 32%. Two areas of staff satisfaction: workload, and compensation, decreased following PCO. Five areas of staff satisfaction: treatment team, patient relationships, facility support, efficiency, and quality, increased following PCO.

The number of hours worked per week, nursing support and the staff position were the key variables affecting staff satisfaction. Other important variables included age, gender, and type of employee. Duties or activities associated with increased staff satisfaction included staff training and patient education. Administrative activities were related to lower satisfaction. Physician satisfaction was closely related to military training at USUHS or during ROTC. It was also affected by administrative support and additional patient care rooms. Dissatisfaction was sometimes related to the inability of the local medical leadership to provide the support staff required for optimization.

One area of dissatisfaction for many of the providers was the Air Force metric requiring 25 patient visits per day. Many providers felt sufficient pressure to meet this metric that they required their patients to make extra visits. Overall, this had a negative effect on efficiency. This problem has recently been addressed by changing the productivity metric that was based on pure patients seen per day to one based on relative values.

Primary care optimization is a very new program, less than a year old in most facilities. Efficiency gains are impressive, but more efficiency will be needed to meet the Surgeon General's goal of an enrollment of 1500 patients per provider and productivity of 25 patients per day. Eighteen percent more patients will need to be enrolled to each provider and efficiency will need to increase 31% to meet the goal. Providers state that they could increase efficiency another 25% if they have unlimited support resources, but it is unreasonable to think that this will be possible for all providers. Military provider workload is currently comparable to their civilian counterparts. As primary care optimization matures and the leadership continues to press for more productivity, PCO staff satisfaction may decline because of longer hours and a more hectic work pace. Patient satisfaction may also decrease if staff satisfaction decreases and if it becomes more difficult for patients to gain access to medical care. In order to evaluate the effect of these changes, this study should be repeated in another year after the teams have matured and as more patients are enrolled to the providers.

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**Table 1****Determinants of Patient Satisfaction**

Donabedian Model	Determinant	Impact on Satisfaction	Researchers
<u>Structure</u>	Patients choose own provider	Increase	Schmitttdiel
	Patients empanelled to single provider	Increase	Schmitttdiel
	Small practices	Increase	Steven
	Provide same-day appointments	Increase	Sixma
	Ensure Provider Autonomy	Increase	Greenley
<u>Process</u>			
Patient Aspects	Elderly	Increase	Mangelsdorff
	Healthy	Increase	Reubin
	Female	Increase	Pascoe
	Lower expectations	Increase	Ware
Aspects of MD	Middle-aged, male	Increase	Ross
	High productivity	Increase	DeBakker
Patient Care	Longer patient appointments	Increase	DeBakker
	More physical exams and blood tests	Increase	DeBakker
	More frequently refer to specialists	Increase	DeBakker
	Prescribe less medication	Increase	DeBakker
	Provide more patient education	Increase	DeBakker
	Meet patient requests	Increase	Like
<u>Outcome</u>	Improvement in health	Increase	Carmel, Kane

Table 2

Staff Satisfaction Groups, Facets and Reliability

Groups	Facets	Chronbach's Alpha	
		Current	Change in Satisfaction
Workload	Q 1-2 – Leisure Time	.7125	.7846
	Q 3-4 – Pace of Work		
Treatment Team	Q 5-6 – Technician Support	.8023	.8376
	Q 7-8 – Nurse Support		
Facility Support	Q 9-10 – Medical Record Availability		
	Q 11-12 – Treatment Team Interaction		
Practice Autonomy	Q 13-14 – Teamwork and Support		
	Q 15-16 - Exam & Treatment Rooms	.7758	.7747
Organization	Q 17-18 - Clinic Layout		
	Q 19-20 – Equipment		
Organization	Q 21-22 – Supply Availability		
	Q 23-24 – Patient Care Autonomy	.7682	.7482
Organization	Q 25-26 – Process Autonomy		
	Q 27-28 – Scheduling Autonomy		
Organization	Q 29-30 – Primary Care Emphasis	.8407	.8229
	Q 31-32 – Local Leadership		
Organization	Q 33-34 – Air Force Leadership		

Note. A Chronbach's Alpha of over .7000 indicates good internal reliability.

Table 3

Staff Satisfaction Groups, Facets and Reliability (Cont)

Groups	Facets	Chronbach's Alpha	
		Current	Change in Satisfaction
Professional Experience	Q 35-36 – Consultant Interaction Q 37-38 – Professional Interaction Q 39-40 – Training Q 41-42 – Scope of Practice Q 43-44 – Teaching Opportunities	.7683	.8516
Patient Relationships	Q 45-46 – Patient Appreciation Q 47-48 – Contribution to Pt Lives Q 49-50 – Current Relationships	.8766	.9166
Efficiency	Q 51-52 – Efficient Use of Pt Time Q 53-54 – Efficient Provider Use Q 55-56 – Overall Efficiency	.7076	.7408
Quality of Medical Care	Q 57-58 – Population Health Data Q 59-60 – Time with each Pt Q 61-62 – Continuity of Care Q 63-64 – Overall Quality	.7095	.7206
Compensation	Q 65-66 – Pay Q 67-68 – Prospects for Promotion Q 69-70 – Recognition and Awards	.7840	.7682

Note. A Chronbach's Alpha of over .7000 indicates good internal reliability.

Table 4

Staff Satisfaction Groups, Facets and Reliability (Cont)

Groups	Facets	Chronbach's Alpha	
		Current	Change in Satisfaction
Overall Satisfaction	Q 71 – Position	.6069	
	Q 75 – Plan to Separate		
Overall Change	Q 72 – Change in Position		.8458
	Q 76 – Change in Separation Plans		
	Q 73 – Would Do Again		
	Q 74 – Would Recommend to Friend		

Note. A Chronbach's Alpha of over .7000 indicates good internal reliability.

Table 5

## Comparison of Productivity in Optimized Clinics Before and After Primary Care Optimization

	Before PCO		After PCO		Difference		Percent Change
	Mean	Median	Mean	Median	Mean	Median	
Enrollees per PCM	978.8	963.7	1301.9	1269.0	323.1	305.3	33.0%
Outpatient Visits per Day - from GPM	15.0	14.0	19.4	19.0	4.4	5.0	29.3%
Outpatient Visits per Day - self-reported	18.6	19.0	22.4	23.0	3.8	4.0	20.4%

**Table 6**Additional Possible Productivity in Optimal Support Conditions - self-reported

	Mean	Median	Minimum	Maximum
Per cent of Productivity Unutilized	36.1%	25.0%	0%	300%

Table 7

Demographics of Respondents to Staff Satisfaction Survey

	All	Physicians	PAs	NPs	Nurses	MTs	ATs	GPMs	HCIs
n	1343	194	63	31	213	514	214	61	49
Age	31.5	33.8	34.9	41.1	36.9	27.7	28.3	35	39.7
% Male	43%	73%	77%	6.7%	21%	46%	25%	53%	27%
Rank	O-3.4	O-2.1	O-3.8	O-2.9	E-4.3	E-4.1	E-6.6 (7)	E-6.0 (1)	O-3.1
Years in Military Medicine	7.3	5.2	8.9	13.5	8.5	6.7	6.1	9.8	13.4
Months Optimized	6.5	5.5	7.6	5.9	6.4	6.5	6.5	6.6	8.4

Note. Numbers in parentheses represent number of individuals in that subcategory.

Table 8

Self-reported Hours Worked per Week by Members of PCO Teams Before and After Primary CareOptimization

	Before PCO	After PCO	Difference	% Change
All Staff	45.7	47.9	+2.2	+6.0%
Physicians	51.9	54.1	+2.2	+4.2%
Physician Assistants	47.0	49.7	+2.7	+5.7%
Nurse Practitioners	48.0	52.9	+4.9	+10.2%
Clinical Nurses	45.0	47.2	+2.2	+4.9%
Medical Technicians	43.3	46.0	+2.7	+6.2%
Administrative Technicians	42.4	44.8	+2.4	+5.7%
Group Practice Managers	47.6	49.3	+1.7	+3.6%
Health Care Integrators	47.3	48.3	+1.0	+2.1%

Table 9

Activity Analysis for the Entire Staff of Air Force PCO Teams—Percent of Time Spent in Each Activity

Activity	Before PCO	After PCO	Difference	% Change
Outpatient Care	49.67%	45.38%	-4.29%	-8.6%
Patient Education	9.14%	10.60%	1.46%	16.0%
Staff Training	6.31%	6.52%	0.21%	3.3%
Resident Training	1.05%	0.87%	-0.18%	-17.1%
Administration	23.95%	27.63%	3.68%	15.4%
Military/Readiness	6.06%	5.18%	-0.88%	-14.5%
Research	2.31%	2.96%	0.65%	28.1%

Table 10

Activity Analysis for the Providers of Air Force PCO Teams—Percent of Time Spent in Each Activity

Activity	Before PCO	After PCO	Difference	% Change
Outpatient Care	73.00%	73.43%	0.43%	0.6%
Inpatient Care	3.06%	1.66%	-1.40%	-45.8%
Patient Education	6.55%	6.29%	-0.26%	-4.0%
Staff Training	2.15%	3.23%	1.08%	50.2%
Resident Training	0.61%	0.37%	-0.24%	-39.3%
Administration	10.30%	11.27%	0.97%	9.4%
Military/Readiness	3.78%	3.32%	-0.46%	-12.2%
Research	0.30%	0.29%	-0.01%	-3.3%

Table 11

Activity Analysis for the Clinical Nurses of Air Force PCO Teams—Percent of Time Spent in Each Activity

Activity	Before PCO	After PCO	Difference	% Change
Outpatient Care	36.11%	31.87%	-4.24%	-11.7%
Patient Education	18.98%	21.17%	2.19%	11.5%
Staff Training	7.33%	8.12%	0.79%	10.8%
Resident Training	0.25%	0.25%	0.00%	0.0%
Administration	29.29%	30.95%	1.66%	5.7%
Military/Readiness	4.84%	4.50%	-0.34%	-7.0%
Research	1.51%	1.13%	-0.38%	-25.2%

**Table 12**

Activity Analysis for the Medical Technicians of Air Force PCO Teams—Percent of Time Spent in Each Activity

Activity	Before PCO	After PCO	Difference	% Change
Outpatient Care	52.08%	52.36%	0.28%	0.5%
Patient Education	8.14%	11.46%	3.32%	40.8%
Staff Training	9.28%	7.27%	-2.01%	-21.7%
Resident Training	1.73%	1.64%	-0.09%	-5.2%
Administration	17.53%	17.26%	-0.27%	-1.5%
Military/Readiness	7.97%	6.15%	-1.82%	-22.8%
Research	2.92%	3.69%	0.77%	26.4%

Table 13

Activity Analysis for the Administrative Technicians of Air Force PCO Teams—Percent of Time Spent in Each Activity

Activity	Before PCO	After PCO	Difference	% Change
Outpatient Care	12.57%	14.54%	1.97%	15.7%
Patient Education	5.39%	5.42%	0.03%	0.6%
Staff Training	6.68%	6.82%	0.14%	2.1%
Resident Training	1.47%	0.82%	-0.65%	-44.2%
Administration	60.32%	59.91%	-0.41%	-0.7%
Military/Readiness	7.33%	6.04%	-1.29%	-17.6%
Research	6.46%	6.90%	0.44%	6.8%

Table 14

Activity Analysis for the Group Practice Managers of Air Force PCO Teams—Percent of Time Spent in Each Activity

Activity	Before PCO	After PCO	Difference	% Change
Outpatient Care	23.35%	5.25%	-18.10%	-77.5%
Patient Education	7.38%	2.87%	-4.51%	-61.1%
Staff Training	2.88%	7.08%	4.20%	145.8%
Resident Training	0.00%	0.00%	0.00%	0.0%
Administration	56.12%	71.39%	15.27%	27.2%
Military/Readiness	5.81%	6.87%	1.06%	18.2%
Research	1.85%	4.19%	2.34%	126.5%

Table 15

Activity Analysis for the Health Care Integrator of Air Force PCO Teams—Percent of Time Spent in Each Activity

Activity	Before PCO	After PCO	Difference	% Change
Outpatient Care	33.87%	19.00%	-14.87%	-43.9%
Patient Education	12.58%	11.43%	-1.15%	-9.1%
Staff Training	7.08%	10.99%	3.91%	55.2%
Resident Training	0.48%	0.57%	0.09%	18.8%
Administration	34.16%	45.11%	10.95%	32.1%
Military/Readiness	6.37%	5.45%	-0.92%	-14.4%
Research	2.77%	5.02%	2.25%	81.2%

Table 16

## Overall Satisfaction with Workload Among Air Force PCO Teams

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	3.99	.04	*3.68	.04
Physicians	*3.59	.09	*3.46	.08
Physician Assistants	*3.32	.16	*3.27	.17
Nurse Practitioners	*3.27	.25	*3.43	.23
Clinical Nurses	3.94	.09	*3.56	.10
Medical Technicians	*4.22	.06	*3.84	.07
Administrative Technicians	4.02	.10	3.80	.15
Group Practice Managers	4.10	.16	3.88	.21
Health Care Integrators	*4.54	.18	3.88	.16

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 17

## Satisfaction Among Air Force PCO Teams with Level of Leisure Time and Family Time

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.23	.04	*3.71	.05
Physicians	3.95	.12	*3.56	.10
Physician Assistants	*3.41	.21	*3.29	.22
Nurse Practitioners	*3.29	.29	3.63	.26
Clinical Nurses	*4.24	.10	*3.63	.10
Medical Technicians	*4.41	.07	*3.82	.08
Administrative Technicians	*4.29	.12	3.85	.15
Group Practice Managers	4.28	.17	3.93	.19
Health Care Integrators	*4.67	.21	3.81	.16

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 18

## Satisfaction Among Air Force PCO Teams with Pace of Work

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*3.78	.04	*3.68	.05
Physicians	*3.36	.11	*3.51	.11
Physician Assistants	*3.22	.18	*3.21	.20
Nurse Practitioners	*3.06	.28	*3.37	.27
Clinical Nurses	*3.65	.10	*3.50	.12
Medical Technicians	4.04	.07	3.85	.09
Administrative Technicians	*3.76	.12	3.73	.18
Group Practice Managers	3.92	.19	3.96	.27
Health Care Integrators	*4.40	.20	3.95	.21

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 19

Comparison of Support Staff in Optimized Air Force Clinics Before and After PCO

	Before PCO	After PCO	Difference	% Change
Nurses per provider	.42	.74	+ .32	+ 76.2 %
Medical techs per PCM	1.54	1.93	+ .39	+ 25.3 %
Admin techs per PCM	.29	.80	+ .51	+ 175.9 %
Support staff per PCM	2.33	3.47	+ 1.14	+ 48.9 %
GPMs per PCM	.03	.16	+ .13	+ 433.3 %
HCIs per PCM	.06	.17	+ .11	+ 183.3 %

Table 20

## Self Perceptions of Support from Air Force PCO Team Members

	% Responding 'yes'
Do you have two medical technicians per provider?	54 %
Do you have one administrative technician per provider?	45 %
Do you have one-half nurse per provider?	72 %
Did your clinic receive any additional manning to implement PCO?	45 %

Table 21

## Overall Satisfaction with Treatment Team in Air Force PCO Teams

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.61	.04	*4.50	.04
Physicians	*4.44	.09	*4.68	.08
Physician Assistants	*4.26	.13	*4.51	.17
Nurse Practitioners	3.96	.25	4.20	.30
Clinical Nurses	*4.96	.09	*4.75	.11
Medical Technicians	*4.69	.06	*4.48	.08
Administrative Technicians	*4.42	.12	4.12	.15
Group Practice Managers	*4.56	.15	3.87	.24
Health Care Integrators	*4.66	.20	*4.69	.16

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 22

## Satisfaction Among Air Force PCO Providers with Technician Support

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Providers	4.05	.10	*4.56	.10
Physicians	4.08	.12	*4.63	.12
Physician Assistants	4.10	.19	*4.48	.23
Nurse Practitioners	3.61	.33	4.04	.34

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 23

## Satisfaction Among Air Force PCO Providers with Nurse Support

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Providers	*4.55	.10	*4.76	.09
Physicians	*4.65	.12	*4.84	.10
Physician Assistants	*4.54	.19	*4.74	.21
Nurse Practitioners	4.00	.31	4.27	.34

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 24

## Satisfaction Among Air Force PCO Providers with Medical Record Availability

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Providers	*3.61	.10	4.15	.10
Physicians	*3.71	.13	4.22	.12
Physician Assistants	*3.32	.17	3.94	.22
Nurse Practitioners	3.43	.32	4.12	.36

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

**Table 25****Satisfaction in Air Force PCO Teams with Team Member Interaction**

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.76	.04	*4.56	.05
Physicians	*4.93	.10	*4.90	.10
Physician Assistants	*4.73	.17	*4.81	.20
Nurse Practitioners	4.39	.29	4.35	.35
Clinical Nurses	*5.00	.09	*4.77	.11
Medical Technicians	*4.73	.07	*4.47	.08
Administrative Technicians	*4.49	.12	4.10	.16
Group Practice Managers	*4.66	.17	4.00	.25
Health Care Integrators	*4.84	.20	*4.66	.18

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 26

## Satisfaction in Air Force PCO Teams with Support from Other Team Members

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.66	.04	*4.51	.05
Physicians	*4.85	.10	*4.76	.10
Physician Assistants	*4.63	.16	*4.60	.21
Nurse Practitioners	4.32	.31	4.30	.36
Clinical Nurses	*4.92	.10	*4.72	.12
Medical Technicians	*4.65	.06	*4.48	.08
Administrative Technicians	*4.35	.12	4.14	.16
Group Practice Managers	*4.46	.18	3.75	.27
Health Care Integrators	*4.49	.23	*4.72	.19

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 27

## Comparison of Facility Support Before and After PCO

	Before PCO	After PCO	Difference	% Change
Patient exam rooms/pcm	1.63	2.05	+ 0.4	+ 25.0 %
Patient treatment rooms/pcm	0.38	0.43	+ 0.05	+ 13.1 %
Total patient care rooms /pcm	2.01	2.48	+ 0.5	+ 25.0 %
Self-reported exam rooms/pcm		1.96		
Self reported treatment rooms/pcm		0.31		
Self-reported pt care rooms/pcm		2.27		

Table 28

## Overall Satisfaction with Facility Support in Air Force PCO Teams

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.12	.03	*4.13	.03
Physicians	4.08	.08	*4.22	.06
Physician Assistants	4.19	.15	4.12	.12
Nurse Practitioners	4.13	.22	*4.52	.19
Clinical Nurses	3.93	.07	4.04	.07
Medical Technicians	*4.10	.05	4.09	.05
Administrative Technicians	4.10	.07	3.97	.07
Group Practice Managers	*4.51	.12	*4.39	.15
Health Care Integrators	*4.73	.15	*4.54	.13

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 29

## Satisfaction in Air Force PCO Teams with Number of Examination and Treatment

	Rooms		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.65	.04	*4.46	.04
Physicians	*4.94	.12	*4.67	.09
Physician Assistants	*4.89	.20	*4.75	.16
Nurse Practitioners	*5.10	.30	*4.89	.22
Clinical Nurses	*4.50	.11	*4.33	.09
Medical Technicians	*4.47	.07	*4.34	.07
Administrative Technicians	*4.44	.08	*4.22	.08
Group Practice Managers	*5.29	.18	*4.79	.26
Health Care Integrators	*5.45	.19	*4.87	.17

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 30

## Satisfaction in Air Force PCO Teams with Layout of Clinic to Maximize Efficiency

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	3.98	.04	*4.11	.04
Physicians	4.00	.11	*4.25	.09
Physician Assistants	4.33	.18	4.08	.15
Nurse Practitioners	4.00	.29	4.89	.22
Clinical Nurses	*3.74	.10	3.99	.11
Medical Technicians	4.02	.07	4.06	.07
Administrative Technicians	3.92	.11	3.88	.12
Group Practice Managers	3.93	.19	4.14	.23
Health Care Integrators	4.24	.23	*4.50	.23

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 31

## Satisfaction in Air Force PCO Teams with Equipment and Ability to Procure New

## Equipment

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	3.95	.04	4.02	.03
Physicians	*3.76	.09	4.03	.07
Physician Assistants	3.87	.18	3.90	.15
Nurse Practitioners	3.61	.28	4.08	.25
Clinical Nurses	*3.75	.08	3.94	.09
Medical Technicians	4.01	.06	4.02	.06
Administrative Technicians	4.00	.08	3.87	.08
Group Practice Managers	4.25	.16	*4.39	.16
Health Care Integrators	*4.69	.16	*4.53	.14

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 32

## Satisfaction in Air Force PCO Teams with Availability of Supplies

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*3.90	.04	3.95	.03
Physicians	*3.63	.10	3.91	.08
Physician Assistants	3.67	.17	3.73	.14
Nurse Practitioners	3.81	.32	4.18	.23
Clinical Nurses	*3.74	.08	3.90	.08
Medical Technicians	3.90	.07	3.95	.06
Administrative Technicians	4.02	.09	3.91	.09
Group Practice Managers	*4.52	.14	4.25	.16
Health Care Integrators	*4.54	.17	4.25	.14

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 33

## Overall Satisfaction with Autonomy in Air Force PCO Teams

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.34	.04	4.01	.04
Physicians	*4.34	.10	4.04	.09
Physician Assistants	4.29	.15	4.01	.14
Nurse Practitioners	4.29	.24	4.11	.22
Clinical Nurses	*4.33	.09	3.96	.10
Medical Technicians	*4.26	.06	3.92	.07
Administrative Technicians	*4.24	.10	4.05	.12
Group Practice Managers	*5.01	.14	*4.39	.19
Health Care Integrators	*4.97	.19	*4.56	.21

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 34

Satisfaction Among Air Force PCO Providers with Ability to Provide Patient Care  
According to Best Judgment

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Providers	*5.06	.09	4.11	.07
Physicians	*5.07	.11	4.08	.08
Physician Assistants	*5.10	.18	4.14	.17
Nurse Practitioners	*4.97	.28	4.25	.27

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 35

## Satisfaction in Air Force PCO Teams with Ability to Initiate Changes in the Way Work is

	Done			
	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.13	.04	4.08	.05
Physicians	3.97	.12	*4.23	.11
Physician Assistants	3.98	.18	4.14	.16
Nurse Practitioners	3.94	.33	4.00	.28
Clinical Nurses	4.05	.10	3.95	.12
Medical Technicians	*4.20	.07	4.02	.08
Administrative Technicians	4.08	.11	4.06	.14
Group Practice Managers	*4.51	.20	4.14	.26
Health Care Integrators	*4.53	.23	*4.56	.25

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 36

## Satisfaction in Air Force PCO Teams with Ability to Make Changes in Work Schedule

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.39	.05	3.93	.05
Physicians	3.97	.13	3.81	.12
Physician Assistants	3.79	.21	3.77	.22
Nurse Practitioners	3.97	.33	4.07	.31
Clinical Nurses	*4.59	.10	3.97	.11
Medical Technicians	*4.32	.07	*3.83	.08
Administrative Technicians	*4.40	.11	4.04	.14
Group Practice Managers	*5.51	.15	*4.64	.27
Health Care Integrators	*5.41	.20	*4.56	.22

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 37

## Overall Satisfaction with Medical Leadership and the Organization in Air Force PCO

	Teams		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.21	.04	4.01	.04
Physicians	4.03	.09	4.01	.08
Physician Assistants	4.17	.16	3.91	.13
Nurse Practitioners	3.74	.28	3.78	.26
Clinical Nurses	*4.19	.08	4.04	.09
Medical Technicians	*4.16	.06	3.94	.06
Administrative Technicians	*4.24	.09	4.10	.11
Group Practice Managers	*4.84	.15	*4.38	.19
Health Care Integrators	*4.97	.19	4.34	.20

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$

Table 38

## Satisfaction in Air Force PCO Teams with the Emphasis that Local Medical Leadership

## Places on Primary Care

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.30	.04	*4.17	.04
Physicians	*4.26	.11	*4.26	.10
Physician Assistants	4.19	.21	4.04	.19
Nurse Practitioners	4.04	.28	4.25	.26
Clinical Nurses	*4.33	.09	*4.22	.10
Medical Technicians	*4.17	.06	4.03	.07
Administrative Technicians	*4.23	.10	4.20	.14
Group Practice Managers	*5.21	.17	*4.63	.25
Health Care Integrators	*5.17	.23	*4.70	.25

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 39

## Satisfaction in Air Force PCO Teams with Local Medical Leadership

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.33	.04	4.05	.04
Physicians	*4.27	.11	4.09	.09
Physician Assistants	*4.48	.19	4.17	.15
Nurse Practitioners	3.97	.36	3.96	.32
Clinical Nurses	*4.30	.11	4.09	.11
Medical Technicians	*4.24	.06	3.96	.07
Administrative Technicians	*4.30	.10	4.09	.12
Group Practice Managers	*4.95	.19	4.39	.25
Health Care Integrators	*5.10	.23	4.23	.24

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 40

## Satisfaction in Air Force PCO Teams with Air Force Medical Leadership

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	4.01	.04	*3.82	.04
Physicians	*3.55	.11	*3.67	.09
Physician Assistants	3.86	.17	*3.55	.16
Nurse Practitioners	*3.33	.31	*3.35	.30
Clinical Nurses	3.95	.10	*3.79	.11
Medical Technicians	4.08	.06	*3.86	.07
Administrative Technicians	*4.22	.10	4.06	.11
Group Practice Managers	4.32	.20	4.11	.24
Health Care Integrators	*4.62	.19	4.14	.22

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 41

## Overall Satisfaction with Professional Experience in Air Force PCO Teams

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.40	.04	4.06	.04
Physicians	*4.26	.08	*3.86	.06
Physician Assistants	*4.54	.14	4.03	.12
Nurse Practitioners	*4.55	.21	3.92	.17
Clinical Nurses	*4.45	.09	4.10	.10
Medical Technicians	*4.53	.06	*4.21	.07
Administrative Technicians	4.14	.09	3.91	.12
Group Practice Managers	4.06	.17	3.79	.24
Health Care Integrators	*4.62	.18	4.24	.19

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 42

## Satisfaction in Air Force PCO Providers with Interaction with Consultant Physicians

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Providers	*4.51	.09	*4.10	.05
Physicians	*4.46	.11	4.07	.06
Physician Assistants	*4.57	.17	4.19	.12
Nurse Practitioners	*4.61	.30	4.11	.20

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 43

Satisfaction in Air Force PCO Teams with Ability to Discuss Interesting and Challenging  
Cases with Other Professionals

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Providers	*4.83	.07	4.08	.06
Physicians	*4.79	.11	3.93	.07
Physician Assistants	*4.88	.18	4.10	.15
Nurse Practitioners	*4.81	.30	4.11	.22
Clinical Nurses	*4.87	.10	*4.22	.10

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

**Table 44****Satisfaction among Air Force PCO Providers with Participation in Teaching Activities**

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Providers	3.85	.08	*3.78	.06
Physicians	*3.73	.10	*3.77	.07
Physician Assistants	4.08	.17	3.94	.15
Nurse Practitioners	4.03	.29	*3.44	.27

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 45

## Satisfaction in Air Force PCO Teams with Training to Care for Patients Efficiently

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.42	.04	*4.09	.04
Physicians	*4.49	.11	3.96	.06
Physician Assistants	*4.65	.20	3.94	.16
Nurse Practitioners	*4.84	.30	4.30	.19
Clinical Nurses	4.19	.10	4.05	.10
Medical Technicians	*4.61	.07	*4.25	.07
Administrative Technicians	4.18	.11	3.87	.13
Group Practice Managers	3.64	.22	3.82	.28
Health Care Integrators	*4.58	.22	4.14	.18

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 46

## Satisfaction in Air Force PCO Teams with Scope of Practice

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.30	.04	3.99	.05
Physicians	3.84	.12	*3.57	.09
Physician Assistants	*4.51	.20	4.00	.17
Nurse Practitioners	4.47	.29	3.62	.24
Clinical Nurses	*4.32	.10	4.08	.11
Medical Technicians	*4.45	.07	*4.17	.08
Administrative Technicians	4.10	.11	3.95	.15
Group Practice Managers	*4.52	.18	3.75	.23
Health Care Integrators	*4.65	.21	4.34	.25

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 47

## Overall Satisfaction with Patient Relations in Air Force PCO

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*5.01	.04	*4.48	.04
Physicians	*5.20	.08	*4.26	.07
Physician Assistants	*5.34	.13	*4.37	.15
Nurse Practitioners	*5.27	.18	4.14	.22
Clinical Nurses	*4.82	.09	*4.53	.12
Medical Technicians	*5.04	.06	*4.61	.07
Administrative Technicians	*4.75	.10	*4.49	.12
Group Practice Managers	*5.07	.13	4.30	.24
Health Care Integrators	*5.36	.17	*4.65	.17

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 48

## Satisfaction in Air Force PCO Teams with Patient Appreciation

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.82	.04	*4.43	.04
Physicians	*5.04	.09	*4.27	.08
Physician Assistants	*5.14	.16	*4.42	.17
Nurse Practitioners	*4.81	.26	4.11	.24
Clinical Nurses	*4.61	.11	*4.47	.13
Medical Technicians	*4.85	.07	*4.53	.07
Administrative Technicians	*4.62	.11	*4.47	.12
Group Practice Managers	*4.72	.17	4.18	.26
Health Care Integrators	*5.20	.21	*4.52	.20

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 49

## Satisfaction in Air Force PCO Teams with their Contribution to the Lives of Patients

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*5.19	.04	*4.52	.04
Physicians	*5.27	.08	*4.25	.08
Physician Assistants	*5.48	.13	4.25	.16
Nurse Practitioners	*5.55	.16	4.15	.23
Clinical Nurses	*5.04	.09	*4.60	.12
Medical Technicians	*5.23	.06	*4.69	.07
Administrative Technicians	*4.88	.10	*4.51	.13
Group Practice Managers	*5.39	.13	*4.39	.24
Health Care Integrators	*5.50	.15	*4.78	.17

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 50

## Satisfaction Among Air Force PCO Providers with their Current Relationships with their

## Patients

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Providers	*5.33	.07	*4.28	.07
Physicians	*5.29	.08	*4.25	.08
Physician Assistants	*5.41	.15	*4.44	.17
Nurse Practitioners	*5.45	.19	4.14	.24

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 51

Usage of Tools to Increase Efficiency of Providers in Air Force PCO Teams—Percent of Clinics that Use the Tools Before and After PCO

Tools	Before PCO	After PCO	% Change
Nurse Triage	46 %	77 %	+67.4 %
Nurse/Technician Managed Clinics	43 %	61 %	+41.9 %
Charting	9 %	33 %	+266.7 %
Clinical Preventive Services	33 %	63 %	+90.9 %
Dictation Support	16 %	24 %	+50.0 %
Coding Support	8 %	32 %	+300.0 %

Table 52

## Overall Satisfaction with Efficiency in Air Force PCO Teams

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.20	.03	*4.31	.04
Physicians	*3.66	.08	4.12	.07
Physician Assistants	3.79	.13	4.09	.14
Nurse Practitioners	*3.55	.21	4.07	.27
Clinical Nurses	*4.25	.09	*4.45	.10
Medical Technicians	*4.38	.05	*4.35	.07
Administrative Technicians	*4.33	.09	*4.41	.11
Group Practice Managers	*4.39	.16	4.27	.22
Health Care Integrators	4.28	.16	*4.59	.15

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 53

## Satisfaction in Air Force PCO Teams with Efficient Use of Patient Time

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	3.98	.04	*4.21	.04
Physicians	*3.70	.10	*4.18	.08
Physician Assistants	3.81	.17	4.14	.17
Nurse Practitioners	3.60	.27	4.04	.32
Clinical Nurses	3.93	.10	*4.26	.12
Medical Technicians	4.10	.07	*4.20	.07
Administrative Technicians	4.04	.10	*4.27	.12
Group Practice Managers	4.15	.19	4.14	.24
Health Care Integrators	4.06	.17	*4.44	.16

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 54

## Satisfaction Among Air Force PCO Providers with the Amount of Time in Activities not

## Related to Patient Care

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Providers	*3.19	.08	*3.64	.08
Physicians	*3.17	.10	*3.61	.09
Physician Assistants	*3.41	.16	3.69	.18
Nurse Practitioners	*2.90	.24	3.78	.30

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 55

## Satisfaction in Air Force PCO Teams with Overall Treatment Team Efficiency

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.52	.04	*4.54	.04
Physicians	4.11	.10	*4.55	.09
Physician Assistants	4.16	.16	*4.44	.17
Nurse Practitioners	4.16	.25	4.41	.33
Clinical Nurses	*4.57	.10	*4.64	.11
Medical Technicians	*4.66	.06	*4.50	.07
Administrative Technicians	*4.62	.10	*4.56	.12
Group Practice Managers	*4.62	.16	4.39	.24
Health Care Integrators	*4.50	.17	*4.75	.19

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 56

## Overall Satisfaction with Quality of Medical Care in Air Force PCO Teams

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.55	.03	*4.43	.03
Physicians	*4.19	.07	4.09	.06
Physician Assistants	4.16	.12	4.18	.12
Nurse Practitioners	4.02	.18	4.10	.18
Clinical Nurses	*4.56	.07	*4.58	.09
Medical Technicians	*4.71	.05	*4.57	.06
Administrative Technicians	*4.54	.08	*4.45	.10
Group Practice Managers	*4.90	.12	*4.42	.12
Health Care Integrators	*4.67	.17	*4.76	.21

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 57

Satisfaction in Air Force PCO Teams with Access to Data Reflecting the Demographics  
and Health Status of the Enrolled Population

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.09	.04	*4.24	.04
Physicians	*3.73	.09	*4.19	.07
Physician Assistants	3.95	.15	4.29	.15
Nurse Practitioners	3.63	.23	4.23	.19
Clinical Nurses	3.99	.10	*4.26	.11
Medical Technicians	*4.26	.05	*4.24	.06
Administrative Technicians	*4.27	.09	4.21	.11
Group Practice Managers	3.93	.20	4.00	.22
Health Care Integrators	4.10	.24	*4.72	.28

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 58

## Satisfaction Among Air Force PCO Providers with Amount of Time to Care for Each

	Patient			
	Current Satisfaction Value	SEM	Change in Satisfaction Value	SEM
All Providers	*3.43	.09	*3.29	.08
Physicians	*3.46	.11	*3.28	.10
Physician Assistants	*3.32	.19	*3.31	.18
Nurse Practitioners	3.45	.30	*3.30	.27

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 59

## Satisfaction in Air Force PCO Teams with Continuity of Care that Patients Receive

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.64	.04	*4.69	.04
Physicians	*4.50	.10	*4.59	.09
Physician Assistants	*4.38	.17	*4.73	.18
Nurse Practitioners	3.90	.27	*4.54	.27
Clinical Nurses	*4.50	.08	*4.76	.10
Medical Technicians	*4.79	.06	*4.74	.07
Administrative Technicians	*4.65	.10	*4.56	.12
Group Practice Managers	*4.95	.16	*4.75	.16
Health Care Integrators	*4.52	.19	*4.88	.23

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 60

## Satisfaction in Air Force PCO Teams with Overall Quality of Medical Care Provided

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*5.11	.03	*4.59	.04
Physicians	*5.05	.09	*4.29	.08
Physician Assistants	*4.98	.15	*4.38	.16
Nurse Practitioners	*5.10	.21	4.37	.21
Clinical Nurses	*5.24	.08	*4.74	.10
Medical Technicians	*5.09	.06	*4.72	.07
Administrative Technicians	*4.88	.10	*4.61	.12
Group Practice Managers	*5.75	.12	*4.50	.19
Health Care Integrators	*5.37	.19	*4.69	.26

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 61

## Overall Satisfaction with Compensation in Air Force PCO Teams

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	4.07	.04	*3.88	.03
Physicians	4.15	.08	3.92	.05
Physician Assistants	4.23	.13	3.90	.10
Nurse Practitioners	3.95	.20	3.79	.17
Clinical Nurses	*4.49	.09	3.93	.08
Medical Technicians	*3.82	.06	*3.82	.05
Administrative Technicians	*3.66	.09	*3.82	.09
Group Practice Managers	*4.87	.14	4.23	.13
Health Care Integrators	*5.18	.19	4.19	.14

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 62

## Satisfaction in Air Force PCO Teams with Pay and Other Benefits

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.13	.04	*3.89	.03
Physicians	4.13	.12	3.90	.06
Physician Assistants	*4.43	.18	3.98	.12
Nurse Practitioners	*4.74	.22	3.74	.18
Clinical Nurses	*4.92	.10	*4.19	.08
Medical Technicians	*3.65	.07	*3.74	.06
Administrative Technicians	*3.70	.10	3.82	.11
Group Practice Managers	*4.95	.17	*4.18	.16
Health Care Integrators	*5.54	.16	4.21	.12

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 63

## Satisfaction in Air Force PCO Teams with Prospects for Promotion

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.19	.04	*3.93	.03
Physicians	*4.45	.09	3.99	.05
Physician Assistants	*4.36	.14	3.98	.12
Nurse Practitioners	3.48	.29	3.81	.22
Clinical Nurses	*4.26	.11	*3.73	.11
Medical Technicians	4.11	.06	3.96	.05
Administrative Technicians	*3.73	.10	3.83	.11
Group Practice Managers	*4.85	.18	4.25	.17
Health Care Integrators	*5.01	.24	4.14	.20

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 64

## Satisfaction in Air Force PCO Teams with Opportunities for Recognition and Awards

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*3.91	.04	*3.84	.04
Physicians	3.86	.09	*3.88	.06
Physician Assistants	3.90	.17	3.75	.14
Nurse Practitioners	3.61	.27	3.82	.23
Clinical Nurses	*4.32	.10	3.89	.10
Medical Technicians	*3.72	.07	*3.78	.07
Administrative Technicians	*3.56	.11	3.82	.11
Group Practice Managers	*4.78	.19	4.25	.14
Health Care Integrators	*4.94	.23	4.10	.17

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 65

## Satisfaction in Air Force PCO Teams with Current Position in the Military

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
All Staff	*4.12	.04	3.94	.05
Physicians	*3.73	.11	*3.76	.09
Physician Assistants	4.30	.16	4.00	.15
Nurse Practitioners	4.29	.28	3.59	.29
Clinical Nurses	4.10	.11	3.92	.11
Medical Technicians	*4.16	.07	4.00	.08
Administrative Technicians	*3.76	.12	3.86	.15
Group Practice Managers	*4.95	.15	3.96	.21
Health Care Integrators	*5.32	.18	*4.55	.24

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 66

## Desire to Continue in the Military in Air Force PCO Teams

	Likelihood of Separation		Change in Likelihood	
	Value	SEM	Value	SEM
All Staff	4.05	.06	*4.27	.05
Physicians	*2.71	.14	3.84	.11
Physician Assistants	4.29	.28	3.98	.20
Nurse Practitioners	3.73	.42	3.86	.34
Clinical Nurses	*4.82	.14	*4.57	.13
Medical Technicians	4.07	.10	*4.37	.08
Administrative Technicians	3.80	.16	4.05	.13
Group Practice Managers	*4.98	.29	*4.58	.24
Health Care Integrators	*5.43	.29	*5.13	.25

Note. Likelihood of Separation is scaled from one to seven. One equals very likely, seven equals very unlikely. Change in Likelihood is also scaled from one to seven. One equals large increase in likelihood, seven equals large decrease in likelihood.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 67

## Satisfaction in Air Force PCO Teams with Changes in Military Primary Care

	Would Repeat		Would Recommend	
	Value	SEM	Value	SEM
All Staff	*4.42	.05	*4.41	.05
Physicians	*4.47	.11	*4.44	.11
Physician Assistants	4.33	.17	4.28	.19
Nurse Practitioners	4.37	.33	4.16	.34
Clinical Nurses	*4.47	.11	*4.55	.12
Medical Technicians	*4.41	.08	*4.39	.08
Administrative Technicians	4.15	.13	4.05	.13
Group Practice Managers	*4.70	.22	*4.87	.21
Health Care Integrators	*5.11	.20	*5.42	.22

Note. Would Repeat is scaled from one to seven. One equals definitely wouldn't accept position again, seven equals definitely would accept position. Would Recommend is also scaled from one to seven. One equals definitely wouldn't recommend the position to a friend, seven equals definitely would recommend the position.

Table 68

## Change in Overall Satisfaction in Air Force PCO Teams

	Change in Satisfaction	
	Value	SEM
All Staff	*4.31	.04
Physicians	4.15	.09
Physician Assistants	4.17	.15
Nurse Practitioners	4.00	.27
Clinical Nurses	*4.42	.09
Medical Technicians	*4.34	.06
Administrative Technicians	4.04	.10
Group Practice Managers	*4.74	.17
Health Care Integrators	*5.07	.17

Note. Change in satisfaction is scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 69

**Factors Correlated to Staff Satisfaction and their Descriptions—Staff Characteristics**

Factors	Description
Academy	Is the provider an academy graduate? 1 = yes, 0 = no.
Age	The age of the staff member.
Contractor	Was the staff member a contractor? 1 = yes, 0 = no
Enlisted Rank	The rank of the staff member if enlisted military.
Experience in Federal Medicine	The total number of years the staff member had worked in federal health care.
Experience in Medicine	The total number of years that the staff member had worked in the medical field.
Experience in Optimized Clinics	The total number of months that the staff member had worked in an optimized clinic.
Gender	The gender of the staff member: 0 = female, 1 = male.
Government Service Grade	The GS Grade of the staff member.
HPSP Scholarship	Is the provider an health professions scholarship program graduate? 1 = yes, 0 = no.
Officer Rank	The Rank of the staff member if a military officer.

Table 70

**Factors Correlated to Staff Satisfaction and their Descriptions—Staff Characteristics (Continued)**

Factors	Description
Provider Specialty	The specialty of the provider, physicians only: 1 = primary care, 2 = family practice, 3 = pediatrics, 4 = internal medicine.
ROTC Graduate	Is the provider an reserve officer training corps graduate? 1 = yes, 0 = no.
Staff Position	1 = provider, 2 = nurse, 3 = medical technician, 4 = administrative technician, 5 = group practice manager, 6 = health care integrator.
Type of Employee	The type of worker: 1 = contractor, 2 = civil servant, 3 = enlisted military, 4 = military officer.
Type of Provider	1 = Medical Doctor, 2 = Doctor of Osteopathy, 3 = Nurse Practitioner, 4 = Physician Assistant.
USUHS Graduate	Is the provider a graduate of the Uniformed Services University of the Health Sciences? 1 = yes, 0 = no.

Table 71

**Factors Correlated to Staff Satisfaction and their Descriptions—Facility and Location Characteristics**

Factors	Description
CONUS	The facility is within the continental United States: 1 = yes, 0 = no.
MAJCOM	The Major Command to which the facility is assigned: 1 = Air Combat Command, 2 = Air Education and Training Command, 3 = Air Force Material Command, 4 = Air Force Special Operations Command, 5 = Air Force Space Command, 6 = Air Mobility Command, 7 = Pacific Air Forces Command, 8 = USAF Academy, 9 = U.S. Air Forces in Europe Command.
TRICARE Region	The TRICARE Region in which the clinic resides. Numbered 1-6, 8-12, Tricare Europe = 13.
Type of Facility	1 = small clinic, < 5 providers, 2 = medium clinic, 5-10 providers, 3 = large clinic, >10 providers, 4 = small hospital, < 50 beds, 5 = medium hospital, 50 – 100 beds, 6 = large hospital, > 100 beds.

Table 72

**Factors Correlated to Staff Satisfaction and their Descriptions—Manpower Support Characteristics from Extent of Change Survey**

Factors	Description
<b>Admin Techs per Provider</b>	The number of administrative technicians assigned to each provider at the time of the survey.
<b>Admin Techs per Provider, Change</b>	The change in the number of administrative technicians assigned to each provider with the initiation of PCO.
<b>Group Practice Managers per Provider</b>	The number of GPMs assigned for each provider at the time of the survey.
<b>GPMs per Provider, Change</b>	The change in the number of GPMs assigned for each provider with the initiation of PCO.
<b>Health Care Integrators per Provider</b>	The number of HCIs assigned for each provider at the time of the survey.
<b>HCIs per Provider, Change</b>	The change in the number of HCIs assigned for each provider with the initiation of PCO.
<b>Med Techs per Provider</b>	The number of medical technicians assigned to each provider at the time of the survey.
<b>Med Techs per Provider, Change</b>	The change in the number of medical technicians assigned to each provider with the initiation of PCO.
<b>Nurses per Provider</b>	The number of nurses assigned to each provider at the time of the survey.
<b>Nurses per Provider, Change</b>	The change in the number of nurses assigned to each provider with the initiation of PCO.

Table 73

**Factors Correlated to Staff Satisfaction and their Descriptions—Manpower Support Characteristics from Staff Satisfaction Survey**

Factors	Description
<b>Self-reported <math>\frac{1}{2}</math> Nurse per Provider</b>	Does your treatment team have at least $\frac{1}{2}$ nurse for every provider?  1 = yes, 0 = no.
<b>Self-reported 1 Admin Tech per Provider</b>	Does your treatment team have at least 1 administrative technician for every provider? 1 = yes, 0 = no.
<b>Self-reported 2 Med Techs per Provider</b>	Does your treatment team have at least 2 medical technicians for every provider?  1 = yes, 0 = no.
<b>Self-reported Additional Manning</b>	Did your treatment team receive additional manning as a result of PCO?  1 = yes, 0 = no.

Table 74

**Factors Correlated to Staff Satisfaction and their Descriptions—Facility Support Characteristics**

Factors	Description
Exam Rooms per Provider	The number of patient examination rooms provided for each provider at the time of the survey.
Exam Rooms per Provider, Change	The change in the number of patient examination rooms provided for each provider with the initiation of PCO.
Treatment Rooms per Provider	The number of patient treatment rooms provided for each provider at the time of the survey.
Treatment Rooms per Provider, Change	The change in the number of patient treatment rooms provided for each provider with the initiation of PCO.
Self-reported Exam Rooms per Provider	How many patient examination rooms do you or your providers have to care for patients?
Self-reported Tx Rooms per Provider	How many patient treatment rooms do you or your providers have to care for patients?
Self-reported Additional Pt Care Rooms	Did your treatment team receive additional patient care rooms as a result of PCO?
	1 = yes, 0 = no.

Table 75

**Factors Correlated to Staff Satisfaction and their Descriptions—Staff Duties and Activities**

Factors	Description
Percent of Time in Administration	Percent of time the staff member claimed to work in administration at the time of the survey.
Percent of Time in Administration, Change	Change in the percent of time the staff member claimed to work in administration with the initiation of PCO.
Percent of Time in Impatient Care	Percent of time the staff member claimed to work in inpatient care at the time of the survey. Providers only.
Percent of Time in Inpatient Care, Change	Change in the percent of time the staff member claimed to work in inpatient care with the initiation of PCO. Providers only.
Percent of Time in Military Activities	Percent of time the staff member claimed to work in military activities at the time of the survey.
Percent of Time in Military Activities, Change	Change in the percent of time the staff member claimed to work in military activities with the initiation of PCO.

Table 76

**Factors Correlated to Staff Satisfaction and their Descriptions—Staff Duties and Activities (Continued)**

Factors	Description
Percent of Time in Outpatient Care	Percent of time the staff member claimed to work in outpatient care at the time of the survey.
Percent of Time in Outpatient Care, Change	Change in the percent of time the staff member claimed to work in outpatient care with the initiation of PCO.
Percent of Time in Patient Education	Percent of time the staff member claimed to work in patient education at the time of the survey.
Percent of Time in Patient Education, Change	Change in the percent of time the staff member claimed to work in patient education with the initiation of PCO.
Percent of Time in Research	Percent of time the staff member claimed to work in research at the time of the survey.
Percent of Time in Research, Change	Change in the percent of time the staff member claimed to work in research with the initiation of PCO.

Table 77

**Factors Correlated to Staff Satisfaction and their Descriptions—Staff Duties and Activities (Continued)**

Factors	Description
Percent of Time in Residency Training	Percent of time the staff member claimed to work in residency training at the time of the survey.
Percent of Time in Residency Training, Change	Change in the percent of time the staff member claimed to work in residency training with the initiation of PCO.
Percent of Time in Staff Training	Percent of time the staff member claimed to work in staff training at the time of the survey.
Percent of Time in Staff Training, Change	Change in the percent of time the staff member claimed to work in staff training with the initiation of PCO.
Percent of Time Working in Optimized Clinic	The percent of time that the staff member works in direct support of the PCO.

Table 78

**Factors Correlated to Staff Satisfaction and their Descriptions—Workload Indicators**

Factors	Description
Enrollees per Provider	The number of patients enrolled to each provider at the time of the survey.
Enrollees per Provider, Change	The change in the number of patients enrolled to each provider with the initiation of PCO.
Extra Possible Productivity	The extra possible productivity if providers were "given all of the nurses, technicians, exam rooms and other support that money could buy". Asked only of providers.
Hours Worked per Week	The hours worked per week at the time of the survey as reported by the staff members.
Hours Worked per Week, Change	The change in the hours worked per week with the initiation of PCO as reported by the staff members.
Productivity	The number of patients per day that the providers saw at the time of the survey.
Productivity, Change	The change in the number of patients per day seen by the providers with the initiation of PCO.
Self-reported Productivity	How many patients per week do you currently see? Asked only of providers.
Self-reported Productivity, Change	The increase in patients seen per week with the initiation of PCO. Providers only.

Table 79

**Factors Correlated to Staff Satisfaction and their Descriptions—Efficiency Tool Usage**

Factors	Description
Charting Support	Were providers given assistance with charting at the time of the survey?
Charting Support, Change	The change in charting support with the initiation of PCO.
CPS Support	Were the providers given assistance providing clinical preventive services when survey taken?
CPS Support, Change	The change in clinical preventive services support with the initiation of PCO.
Coding Support	Were the providers given assistance with coding patient diagnoses at the time of the survey?
Coding Support, Change	The change in coding support with the initiation of PCO.
Dictation Support	Were the providers provided with dictation services at the time of the survey?
Dictation Support, Change	The change in dictation support with the initiation of PCO.
Nurse Managed Clinic Utilization	Did the clinics utilize nurse or technician managed clinics at the time of the survey?
Nurse Managed Clinic, Change	The change in the utilization of nurse or technician managed clinics with the initiation of PCO.
Nurse Triage Utilization	Did the clinics utilize nurse triage at the time of the survey?
Nurse Triage Utilization, Change	The change in the utilization of nurse triage with the initiation of PCO.

Table 80

Factors Related to Overall Satisfaction with Workload in Air Force PCO Teams—

## Positive Correlations

Factors	<u>n</u>	Pearson Correlation	$\rho$
Staff Position	1337	.154	.000
Percent of Time in Patient Education	1121	.134	.000
Academy Graduate	281	.123	.039
Self-reported $\frac{1}{2}$ Nurse per Provider	1289	.108	.000
Clinical Preventive Services Support	1317	.105	.000
Percent of Time in Residency Training	1117	.083	.006
Self-reported 1 Admin Tech per Provider	1294	.081	.004
Self-reported 2 Med Techs per Provider	1295	.080	.004
Percent of Time in Staff Training	1123	.075	.012
Coding Support	1337	.073	.008
Self-reported Additional Manning	1212	.071	.014
CONUS	1310	.058	.037
Nurses per Provider, Change	1319	.057	.039

Table 81

Factors Related to Overall Satisfaction with Workload in Air Force PCO Teams —  
Negative Correlations

Factors	n	Pearson Correlation	p
Hours Worked per Week	1127	-.334	.000
Hours Worked per Week, Change	851	-.193	.000
Type of Employee	1298	-.170	.000
Type of Provider	288	-.143	.015
Percent of Time in Administration, Change	801	-.087	.014
Age	1286	-.081	.004
Percent of Time in Outpatient Care	1121	-.079	.008

Table 82

Factors Related to Overall Satisfaction with Workload in Air Force PCO Teams—

## Stepwise Linear Regression

<u>Model</u>	$r^2$	df	F	p-Value
Stepwise Multiple Linear Regression	.180	7	14.828	.000
<hr/>				
Factors	$\beta$	t	p-Value	
Hours Worked per Week	-0.048	-6.139	.000	
Gender	0.419	3.436	.001	
Clinical Preventive Services Support	0.682	2.985	.003	
Percent of Time in Patient Education	0.015	2.880	.004	
Percent of Time in Administration, Change	-0.009	-2.397	.017	
Self-reported ½ Nurse per Provider	0.337	2.393	.017	
Staff Position	0.388	2.308	.021	

Notes.  $r^2$  = Coefficient of determination for the regression model, df = degrees of freedom for the regression model, F = F-test value for the regression model, p-Value = significance,  $\beta$  = unstandardized linear regression coefficient for the variable, t = t-test statistic for the variable.

Table 83

## Factors Related to Overall Satisfaction with the Treatment Team in Air Force PCO

## Teams—Positive Correlations

Factors	<i>n</i>	Pearson Correlation	<i>p</i>
Self-reported ½ Nurse per Provider	1288	.196	.000
Self-reported Productivity, Change	232	.179	.006
Self-reported 2 Med Techs per Provider	1294	.169	.000
Med Techs per Provider	1335	.152	.000
Self-reported 1 Admin Tech per Provider	1293	.141	.000
Percent of Time in Patient Education	1119	.132	.000
Nurses per Provider	1335	.130	.000
Self-reported Examination Rooms per Provider	1282	.084	.003
Exam Rooms per Provider	1335	.073	.008
Self-reported Additional Manning	1211	.073	.011
Productivity	1331	.071	.009
Health Care Integrators per Provider	1335	.068	.013
Coding Support, Change	1322	.067	.016
Coding Support	1335	.065	.018
Nurses per Provider, Change	1317	.064	.020
Percent of Time Working in Optimized Clinic	1205	.064	.026
Nurse Managed Clinic Utilization, Change	1310	.060	.029
Self-reported Additional Patient Care Rooms	1217	.060	.036
Percent of Time in Staff Training	1121	.060	.044

Table 84

## Factors Related to Overall Satisfaction with the Treatment Team in Air Force PCO

## Teams — Negative Correlations

Factors	<u>n</u>	Pearson Correlation	$\rho$
Hours Worked per Week, Change	849	-.142	.000
Hours Worked per Week	1125	-.087	.003
Percent of Time in Military Activities, Change	797	-.072	.043
Type of Employee	1296	-.067	.016

Table 85

Factors Related to Overall Satisfaction with the Treatment Team in Air Force PCO  
 Teams—Stepwise Linear Regression

<u>Model</u>	$r^2$	df	F	p-Value
Stepwise Multiple Linear Regression	.147	7	11.639	.000
<hr/>				
Factors	$\beta$	t		p-Value
Self-reported 2 Med Techs per Provider	0.522	4.177		.000
Percent of Time in Patient Education	0.017	3.481		.001
Coding Support, Change	0.325	3.133		.002
Self-reported $\frac{1}{2}$ Nurse per Provider	0.367	2.534		.012
Self-reported Treatment Rooms per Provider	0.666	2.140		.033
Nurses per Provider	0.466	2.011		.045

Notes.  $r^2$  = Coefficient of determination for the regression model, df = degrees of freedom for the regression model, F = F-test value for the regression model, p-Value = significance,  $\beta$  = unstandardized linear regression coefficient for the variable, t = t-test statistic for the variable.

Table 86

Factors Related to Overall Satisfaction with Team Efficiency in Air Force PCO Teams—  
Positive Correlations

Factors	n	Pearson Correlation	p
Staff Position	1323	.167	.000
Self-reported ½ Nurse per Provider	1279	.136	.000
Self-reported 2 Med Techs per Provider	1284	.123	.000
Percent of Time in Patient Education	1108	.119	.000
Self-reported Examination Rooms per Provider	1272	.094	.001
Self-reported 1 Admin Tech per Provider	1283	.092	.001
Percent of Time in Staff Training	1110	.088	.003
Percent of Time in Staff Training, Change	792	.081	.022
Percent of Time in Patient Education, Change	791	.077	.030
Coding Support	1323	.073	.008
Med Techs per Provider	1323	.072	.009
Contractor	1323	.070	.011
Self-reported Additional Patient Care Rooms	1209	.064	.026
Nurses per Provider, Change	1305	.061	.027
Self-reported Treatment Rooms per Provider	1195	.060	.037

Table 87

Factors Related to Overall Satisfaction with Team Efficiency in Air Force PCO Teams —  
Negative Correlations

Factors	<u>n</u>	Pearson Correlation	$\rho$
Hours Worked per Week	1115	-.217	.000
Type of Employee	1284	-.208	.000
Hours Worked per Week, Change	843	-.118	.001
Percent of Time in Outpatient Care	1108	-.115	.000
Nurse Triage Utilization, Change	1281	-.104	.000

Table 88

Factors Related to Overall Satisfaction with Team Efficiency in Air Force PCO Teams—  
Stepwise Linear Regression

<u>Model</u>	$r^2$	df	F	p-Value
Stepwise Multiple Linear Regression	.138	9	8.320	.000
<hr/>				
Factors	$\beta$	t		p-Value
Percent of Time in Patient Education	0.019	3.850		.000
Nurses per Provider, Change	0.409	2.840		.005
Type of Employee	-0.252	-2.790		.005
Self-reported Treatment Rooms per Provider	0.698	2.719		.007
Self-reported Examination Rooms per Provider	0.447	2.608		.009
Percent of Time in Staff Training, Change	0.016	2.460		.014
Staff Position	0.106	2.427		.016
Hours Worked per Week, Change	-0.018	-2.087		.037
Gender	0.220	1.990		.047

Notes.  $r^2$  = Coefficient of determination for the regression model, df = degrees of freedom for the regression model, F = F-test value for the regression model, p-Value = significance,  $\beta$  = unstandardized linear regression coefficient for the variable, t = t-test statistic for the variable.

Table 89

Factors Related to Overall Satisfaction with Compensation in Air Force PCO Teams—  
Positive Correlations

Factors	n	Pearson Correlation	p
Type of Employee	1284	.195	.000
Age	1274	.119	.000
Self-reported Additional Patient Care Rooms	1205	.117	.000
Dictation Support, Change	1300	.114	.000
Self-reported Additional Manning	1199	.096	.001
Experience in Medicine	1290	.088	.001
Self-reported 1 Admin Tech per Provider	1281	.079	.005
Self-reported ½ Nurse per Provider	1277	.073	.009
Percent of Time in Patient Education	1107	.071	.018
Percent of Time in Staff Training	786	.071	.047
Dictation Support	1323	.063	.021
Health Care Integrators per Provider, Change	1305	.062	.025
Group Practice Managers per Provider, Change	1305	.055	.049

**Table 90**

**Factors Related to Overall Satisfaction with Compensation in Air Force PCO Teams —**  
**Negative Correlations**

Factors	n	Pearson Correlation	p
Self-reported Productivity	267	-.197	.001
Hours Worked per Week, Change	836	-.141	.000
Percent of Time in Outpatient Care	796	-.084	.005
Percent of Time in Research	1107	-.075	.012

Table 91

Factors Related to Overall Satisfaction with Compensation in Air Force PCO Teams—  
Stepwise Linear Regression

<u>Model</u>	$r^2$	df	F	p-Value
Stepwise Multiple Linear Regression	.088	6	7.533	.000
<hr/>				
Factors	$\beta$	t		p-Value
Type of Employee	0.371	4.067		.000
Staff Position	0.146	3.333		.001
Dictation Support, Change	0.375	2.876		.004
Age	0.019	2.867		.004
Percent of Time in Patient Education	0.012	2.486		.013
Hours Worked per Week, Change	-0.017	-2.022		.044

Notes.  $r^2$  = Coefficient of determination for the regression model, df = degrees of freedom for the regression model, F = F-test value for the regression model, p-Value = significance,  $\beta$  = unstandardized linear regression coefficient for the variable, t = t-test statistic for the variable.

**Table 92**

## Factors Related to Overall Satisfaction in Air Force PCO Teams—Positive Correlations

Factors	n	Pearson Correlation	p
Type of Provider	283	.172	.004
Percent of Time in Patient Education	1097	.119	.000
Staff Position	1312	.114	.000
Percent of Time in Staff Training	1099	.101	.001
Self-reported ½ Nurse per Provider	1266	.100	.000
Experience in Medicine	1280	.091	.001
Percent of Time in Staff Training, Change	779	.062	.040
Dictation Support, Change	1289	.086	.002
Self-reported Additional Manning	1191	.085	.003
Age	1263	.084	.003
Contractor	1312	.079	.004
Health Care Integrators per Provider, Change	1294	.073	.009
Group Practice Managers per Provider, Change	1294	.067	.016
Self-reported Additional Patient Care Rooms	1195	.066	.022
Percent of Time in Military Activities	1099	.062	.040
Patient Care Rooms per Provider, Change	1294	.058	.035

Table 93

## Factors Related to Overall Satisfaction in Air Force PCO Teams —Negative Correlations

Factors	n	Pearson Correlation	p
Hours Worked per Week	1102	-.103	.001
Hours Worked per Week, Change	830	-.101	.004
Percent of Time in Outpatient Care	1097	-.095	.002
Nurse Triage Utilization, Change	1270	-.076	.007
Admin Techs per Provider, Change	1294	-.069	.013
Charting Support	1299	-.067	.016
Type of Employee	1274	-.065	.020
Nurse Managed Clinic Utilization	1306	-.059	.033
Enrollees per Provider	1312	-.058	.036
Enrollees per Provider, Change	1312	-.057	.039

Table 94

Factors Related to Overall Satisfaction in Air Force PCO Teams—Stepwise Linear Regression

<b>Model</b>	$r^2$	df	F	p-Value
Stepwise Multiple Linear Regression	.055	4	6.711	.000
<hr/>				
Factors	$\beta$	t	p-Value	
Type of Employee	-0.291	-2.700	.007	
Experience in Federal Medicine	0.032	2.639	.009	
Percent of Time in Staff Training, Change	0.023	2.540	.011	
Self-reported $\frac{1}{2}$ Nurse per Provider	0.388	2.308	.021	

Notes.  $r^2$  = Coefficient of determination for the regression model, df = degrees of freedom for the regression model, F = F-test value for the regression model, p-Value = significance,  $\beta$  = unstandardized linear regression coefficient for the variable, t = t-test statistic for the variable.

Table 95

Factors Related to Change in Overall Satisfaction in Air Force PCO Teams—Positive Correlations

Factors	n	Pearson Correlation	p
Self-reported ½ Nurse per Provider	1273	.164	.000
Percent of Time in Patient Education	1104	.157	.000
Self-reported 1 Admin Tech per Provider	1278	.126	.000
Self-reported 2 Med Techs per Provider	1280	.121	.000
CONUS	1292	.106	.000
Self-reported Additional Manning	1197	.104	.000
Med Techs per Provider	1319	.088	.001
Exam Rooms per Provider, Change	1301	.087	.002
Percent of Time in Staff Training	1106	.086	.004
Coding Support	1319	.083	.002
Treatment Rooms per Provider, Change	1301	.082	.003
Contractor	1319	.078	.004
<b>Health Care Integrators per Provider</b>	1319	.078	.005
Group Practice Managers per Provider	1319	.077	.005
Staff Position	1319	.074	.007
Percent of Time in Military Activities	1106	.074	.014
Self-reported Additional Patient Care Rooms	1202	.063	.028
Group Practice Managers per Provider, Change	1301	.062	.026
Nurse Managed Clinic Utilization, Change	1294	.060	.032

Table 96

Factors Related to Change in Overall Satisfaction in Air Force PCO Teams —Negative Correlations

Factors	<i>n</i>	Pearson Correlation	$\rho$
Hours Worked per Week, Change	834	-.277	.000
Hours Worked per Week	1107	-.167	.000
Percent of Time in Administration, Change	785	-.142	.000
Enlisted Rank	639	-.100	.012
Gender	1273	-.094	.001
Enrollees per Provider, Change	1319	-.083	.002
Percent of Time in Administration	1108	-.069	.021
Type of Employee	1281	-.060	.031
TRICARE Region	1285	-.059	.034

Table 97

Factors Related to Change in Overall Satisfaction in Air Force PCO Teams—Stepwise Linear Regression

<b>Model</b>	$r^2$	df	F	p-Value
Stepwise Multiple Linear Regression	.222	12	10.902	.000
<hr/>				
Factors	$\beta$	t		p-Value
Hours Worked per Week, Change	-0.044	-5.175		.000
Charting Support	0.709	3.446		.001
Nurse Managed Clinic Utilization, Change	0.389	3.118		.002
Percent of Time in Staff Training	0.022	3.059		.002
Group Practice Managers per Provider	0.994	3.009		.003
Percent of Time in Administration	-0.007	-2.982		.003
Treatment Rooms per Provider, Change	0.431	2.514		.012
Percent of Time in Patient Education	0.011	2.318		.021
Enrollees per Provider, Change	-0.0004	-2.304		.022
Self-reported 1 Admin Tech per Provider	0.248	2.231		.026
Gender	-0.233	-2.150		.032

Notes.  $r^2$  = Coefficient of determination for the regression model, df = degrees of freedom for the regression model, F = F-test value for the regression model, p-Value = significance,  $\beta$  = unstandardized linear regression coefficient for the variable, t = t-test statistic for the variable.

Table 98

## Factors Related to Desire to Continue in the Military in Air Force PCO Teams—Positive

## Correlations

Factors	n	Pearson Correlation	$\rho$
Experience in Medicine	1262	.195	.000
Age	1246	.194	.000
Experience in Federal Medicine	1259	.157	.000
Staff Position	1294	.157	.000
Percent of Time in Patient Education	1083	.123	.000
Percent of Time in Staff Training	1085	.120	.000
Enlisted Rank	631	.112	.005
Dictation Support, Change	1272	.094	.001
Self-reported $\frac{1}{2}$ Nurse per Provider	1249	.087	.002
Percent of Time in Administration	1087	.065	.032
Productivity, Change	1275	.064	.022
Exam Rooms per Provider, Change	1277	.059	.034
Health Care Integrators per Provider	1294	.059	.035
Self-reported Additional Patient Care Rooms	1182	.058	.045

Table 99

Factors Related to Desire to Continue in the Military in Air Force PCO Teams—Negative Correlations

Factors	n	Pearson Correlation	p
Percent of Time in Outpatient Care	1083	-.160	.000
Hours Worked per Week, Change	821	-.114	.001
Hours Worked per Week	1085	-.104	.001
Enrollees per Provider, Change	1294	-.097	.000
Officer Rank	527	-.088	.043
Type of Employee	1257	-.084	.003
Charting Support, Change	1241	-.081	.004
Charting Support	1281	-.070	.013
Nurse Managed Clinic Utilization	1288	-.060	.032
Enrollees per Provider	1294	-.055	.046

Table 100

Factors Related to Desire to Continue in the Military in Air Force PCO Teams—Stepwise Linear Regression

<u>Model</u>	$r^2$	df	F	p-Value
Stepwise Multiple Linear Regression	.088	5	8.923	.000
<hr/>				
Factors	$\beta$	t	p-Value	
Staff Position	0.305	5.179	.000	
Age	0.025	2.778	.006	
Self-reported ½ Nurse per Provider	0.384	2.327	.020	
Percent of Time in Staff Training, Change	0.020	2.291	.022	
Percent of Time in Administration	-0.007	-2.179	.030	

Notes.  $r^2$  = Coefficient of determination for the regression model, df = degrees of freedom for the regression model, F = F-test value for the regression model, p-Value = significance,  $\beta$  = unstandardized linear regression coefficient for the variable, t = t-test statistic for the variable.

Table 101

Factors Related to Overall Satisfaction in Air Force PCO Physicians—Positive  
Correlations

Factors	n	Pearson Correlation	$\rho$
Dictation Support, Change	185	.217	.003
Self-reported 1 Admin Tech per Provider	185	.205	.005
Experience in Federal Medicine	188	.194	.008
Self-reported $\frac{1}{2}$ Nurse per Provider	189	.171	.019
Self-reported Additional Manning	176	.163	.031
Experience in Medicine	187	.149	.042
Self-reported Treatment Rooms per Provider	184	.149	.043

Table 102

## Factors Related to Overall Satisfaction in Air Force PCO Physicians—Negative Correlations

Factors	n	Pearson Correlation	$\rho$
Nurse Triage Utilization	189	-.165	.023
Type of Employee	182	-.159	.032

Table 103

## Factors Related to Overall Satisfaction in Air Force PCO Physicians—Stepwise Linear Regression

<u>Model</u>	$r^2$	df	F	p-Value
Stepwise Multiple Linear Regression	.281	5	5.935	.000
<hr/>				
Factors	$\beta$	t	p-Value	
Self-reported Additional Patient Care Rooms	1.070	3.270	.002	
Charting Support	1.818	2.843	.006	
USUHS Graduate	1.152	2.629	.010	
Self-reported 1 Admin Tech per Provider	0.774	2.453	.016	
Enrollees per Provider, Change	-0.001	-2.055	.043	

Notes.  $r^2$  = Coefficient of determination for the regression model, df = degrees of freedom for the regression model, F = F-test value for the regression model, p-Value = significance,  $\beta$  = unstandardized linear regression coefficient for the variable, t = t-test statistic for the variable.

Table 104

## Factors Related to Change in Overall Satisfaction in Air Force PCO Physicians—Positive Correlations

Factors	<i>n</i>	Pearson Correlation	$\rho$
Self-reported 1 Admin Tech per Provider	187	.298	.000
Percent of Time in Military Activities	154	.253	.002
Self-reported $\frac{1}{2}$ Nurse per Provider	191	.233	.001
Self-reported 2 Med Techs per Provider	187	.222	.002
Treatment Rooms per Provider, Change	188	.187	.010
Percent of Time in Staff Training, Change	154	.182	.024
Coding Support, Change	189	.176	.016
Percent of Time in Residency Training	176	.174	.021
Nurse Managed Clinic Utilization, Change	187	.166	.023
Self-reported Additional Manning	177	.150	.046
Self-reported Treatment Rooms per Provider	186	.148	.044

Table 105

Factors Related to Change in Overall Satisfaction in Air Force PCO Physicians—  
Negative Correlations

Factors	n	Pearson Correlation	p
Hours Worked per Week, Change	159	-.306	.000
Hours Worked per Week	179	-.173	.021

Table 106

Factors Related to Change in Overall Satisfaction in Air Force PCO Physicians—  
 Stepwise Linear Regression

<u>Model</u>	$r^2$	df	F	p-Value
Stepwise Multiple Linear Regression	.427	7	7.971	.000
<hr/>				
Factors	$\beta$	t		p-Value
Hours Worked per Week, Change	-0.061	-3.035		.003
Self-reported 1 Admin Tech per Provider	0.741	2.900		.005
Self-reported 2 Med Techs per Provider	0.667	2.642		.010
Percent of Time in Staff Training, Change	0.128	2.538		.013
Dictation Support	-0.674	-2.233		.029
Percent of Time in Military Activities	0.087	2.211		.030

Notes.  $r^2$  = Coefficient of determination for the regression model, df = degrees of freedom for the regression model, F = F-test value for the regression model, p-Value = significance,  $\beta$  = unstandardized linear regression coefficient for the variable, t = t-test statistic for the variable.

Table 107

## Factors Related to Desire to Continue in the Military in Air Force PCO Physicians—

## Positive Correlations

Factors	n	Pearson Correlation	$\rho$
Experience in Medicine	185	.290	.000
Officer Rank	177	.286	.000
Experience in Federal Medicine	186	.274	.000
ROTC Graduate	186	.229	.002
Age	179	.219	.003
USUHS Graduate	186	.191	.009
Percent of Time in Residency Training, Change	150	.190	.020
MAJCOM	184	.181	.014
Percent of Time in Military Activities	176	.152	.043
Dictation Support, Change	183	.150	.043

Table 108

Factors Related to Desire to Continue in the Military in Air Force PCO Physicians—  
Negative Correlations

Factors	<i>n</i>	Pearson Correlation	$\rho$
HPSP Scholarship	186	-.197	.007
CONUS	184	-.177	.016
Self-reported Productivity	178	-.167	.026
Type of Employee	181	-.160	.031

Table 109

Factors Related to Desire to Continue in the Military in Air Force PCO Physicians—  
 Stepwise Linear Regression

<u>Model</u>	$r^2$	df	F	p-Value
Stepwise Multiple Linear Regression	.311	5	6.785	.000
<hr/>				
Factors	$\beta$	t		p-Value
Percent of Time in Staff Training, Change	0.166	3.277		.002
USUHS Graduate	1.581	3.077		.003
Self-reported Additional Patient Care Rooms	0.911	2.471		.016
ROTC Graduate	1.961	2.362		.021
Self-reported 1 Admin Tech per Provider	0.792	2.207		.030

Notes.  $r^2$  = Coefficient of determination for the regression model, df = degrees of freedom for the regression model, F = F-test value for the regression model, p-Value = significance,  $\beta$  = unstandardized linear regression coefficient for the variable, t = t-test statistic for the variable.

**Table 110****Comparison of Patient Satisfaction Before and After PCO**

Facets of Patient Satisfaction	Before PCO	After PCO	t	p-value
Overall Satisfaction with Clinics (Q12)	5.80	5.87	.899	.372
Overall Satisfaction with Medical Care (Q5)	5.91	6.00	1.248	.217
Q10c – Referral for Specialty Care	3.48	3.60	1.296	.200
Q9 – Office Wait Time	3.62	3.56	-1.014	.315
Q11 – Time to Return Call	3.29	3.34	.540	.591
Q10b – Access to Medical Care	3.56	3.58	.148	.883
Q10a – Ease of Making Phone Appointment	3.65	3.62	-.409	.684
Q7 – Appointment Wait Time	3.81	3.75	-.747	.458
Access Average	3.57	3.57	.072	.943
Q3j – Overall Quality of Care	4.10	4.14	.617	.540
Q3i – How Well Care Met Needs	3.91	3.98	.968	.337
Q3c – Thoroughness of Treatment	4.12	4.16	.688	.494
Q3h – How Much Helped	3.87	3.94	.995	.324
Q3d – Explanations of Tests	4.13	4.15	.456	.650
Quality Average	4.03	4.07	.815	.418
Q3e – Personal Interest	4.10	4.13	.413	.681
Q3g – Amount of Time with Dr/Staff	3.94	3.99	.727	.470
Q3b – Attention Given to What Pt Said	4.16	4.20	.816	.418
Q3f – Advise on Ways to Stay Healthy	3.95	4.00	.666	.508
Q3a – Friendliness and Courtesy of Staff	4.18	4.20	.306	.761
Interpersonal Relationship Average	4.07	4.10	.638	.526

Note. p-value calculated by comparing means and utilizing t-test.

Table 111

Staff Satisfaction and Change in Satisfaction Scores in the 10 Satisfaction Domains,  
Ordered by Change in Satisfaction

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
Treatment Team	*4.61	.04	*4.50	.04
Patient Relations	*5.01	.04	*4.48	.04
Quality of Medical Care	*4.55	.03	*4.43	.03
Efficiency of Medical Care	*4.20	.03	*4.31	.04
Facility Support	*4.12	.03	*4.13	.03
Professional Experience	*4.40	.04	4.06	.04
Autonomy	*4.34	.04	4.01	.04
Organization and Leadership	*4.21	.04	4.01	.04
Compensation	4.07	.04	*3.88	.03
Workload	3.99	.04	*3.68	.04

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 112

Physician Satisfaction and Change in Satisfaction Scores in the 10 Satisfaction Domains,  
Ordered by Change in Satisfaction

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
Treatment Team	4.44	.04	*4.68	.08
Patient Relations	*5.20	.08	*4.26	.07
Facility Support	4.08	.08	*4.22	.06
Efficiency of Medical Care	*3.66	.08	4.12	.07
Quality of Medical Care	*4.19	.07	4.09	.06
Autonomy	*4.34	.10	4.04	.09
Organization and Leadership	4.03	.09	4.01	.08
Compensation	4.15	.08	3.92	.10
Professional Experience	*4.26	.08	*3.86	.06
Workload	*3.59	.09	*3.46	.08

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 113

Physician Assistant Satisfaction and Change in Satisfaction Scores in the 10 Satisfaction Domains, Ordered by Change in Satisfaction

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
Treatment Team	*4.26	.13	*4.51	.17
Patient Relations	*5.34	.13	*4.37	.15
Quality of Medical Care	4.16	.12	4.18	.12
Facility Support	4.19	.15	4.12	.12
Efficiency of Medical Care	3.79	.13	4.09	.14
Professional Experience	*4.54	.14	4.03	.12
Autonomy	4.29	.15	4.01	.14
Organization and Leadership	4.17	.16	3.91	.13
Compensation	4.23	.13	3.90	.10
Workload	*3.32	.16	*3.27	.17

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 114

Nurse Practitioner Satisfaction and Change in Satisfaction Scores in the 10 Satisfaction Domains, Ordered by Change in Satisfaction

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
Facility Support	4.13	.22	*4.52	.19
Treatment Team	3.96	.25	4.20	.30
Patient Relations	*5.27	.18	4.14	.22
Autonomy	4.29	.24	4.11	.22
Quality of Medical Care	4.02	.18	4.10	.18
Efficiency of Medical Care	*3.55	.21	4.07	.27
Professional Experience	*4.55	.21	3.92	.17
Compensation	3.95	.20	3.79	.17
Organization and Leadership	3.74	.28	3.78	.26
Workload	*3.27	.25	*3.43	.23

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 115

Clinical Nurse Satisfaction and Change in Satisfaction Scores in the 10 Satisfaction Domains, Ordered by Change in Satisfaction

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
Treatment Team	*4.96	.09	*4.75	.11
Quality of Medical Care	*4.56	.07	*4.58	.09
Patient Relations	*4.82	.09	*4.53	.12
Efficiency of Medical Care	*4.25	.09	*4.45	.10
Professional Experience	*4.45	.09	4.10	.10
Facility Support	3.93	.07	4.04	.07
Organization and Leadership	*4.19	.08	4.04	.09
Autonomy	*4.33	.09	3.96	.10
Compensation	*4.49	.09	3.93	.08
Workload	3.94	.09	*3.56	.10

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 116

Medical Technician Satisfaction and Change in Satisfaction Scores in the 10 Satisfaction Domains, Ordered by Change in Satisfaction

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
Patient Relations	*5.04	.06	*4.61	.07
Quality of Medical Care	*4.71	.05	*4.57	.06
Treatment Team	*4.69	.06	*4.48	.08
Efficiency of Medical Care	*4.38	.05	*4.35	.07
Professional Experience	*4.53	.06	*4.21	.07
Facility Support	*4.10	.05	4.09	.05
Organization and Leadership	*4.16	.06	3.94	.06
Autonomy	*4.26	.06	3.92	.07
Workload	*4.22	.06	*3.84	.07
Compensation	*3.82	.06	*3.82	.05

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

Table 117

Administrative Technician Satisfaction and Change in Satisfaction Scores in the 10  
Satisfaction Domains, Ordered by Change in Satisfaction

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
Patient Relations	*4.75	.10	*4.49	.12
Quality of Medical Care	*4.54	.08	*4.45	.10
Efficiency of Medical Care	*4.33	.09	*4.41	.11
Treatment Team	*4.42	.12	4.12	.15
Organization and Leadership	*4.24	.09	4.10	.11
Autonomy	*4.24	.10	4.05	.12
Facility Support	4.10	.07	3.97	.07
Professional Experience	4.14	.09	3.91	.12
Compensation	*3.66	.09	*3.82	.09
Workload	4.02	.10	3.80	.15

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

**Table 118**

**Group Practice Manager Satisfaction and Change in Satisfaction Scores in the 10  
Satisfaction Domains, Ordered by Change in Satisfaction**

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
Quality of Medical Care	*4.90	.12	*4.42	.12
Facility Support	*4.51	.12	*4.39	.15
Autonomy	*5.01	.14	*4.39	.19
Organization and Leadership	*4.84	.15	*4.38	.19
Patient Relations	*5.07	.13	4.30	.24
Efficiency of Medical Care	*4.39	.16	4.27	.22
Compensation	*4.87	.14	4.23	.13
Workload	4.10	.16	3.88	.21
Treatment Team	*4.56	.15	3.87	.24
Professional Experience	4.06	.17	3.79	.24

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .

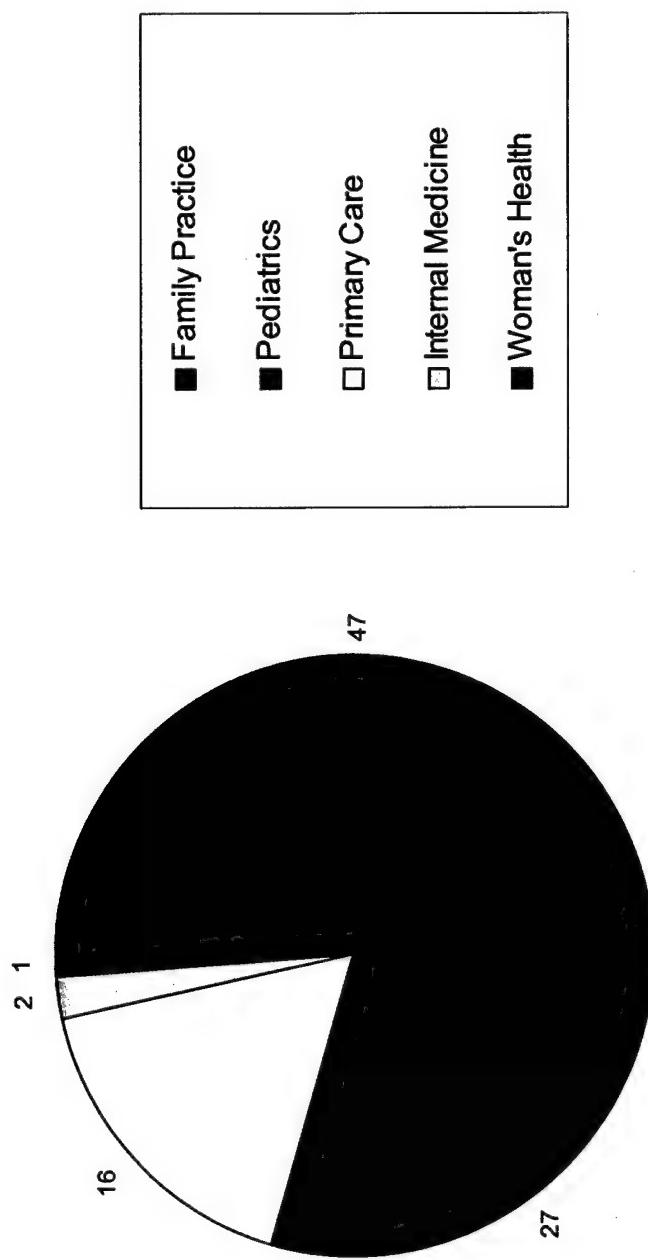
Table 119

Health Care Integrator Satisfaction and Change in Satisfaction Scores in the 10  
Satisfaction Domains, Ordered by Change in Satisfaction

	Current Satisfaction		Change in Satisfaction	
	Value	SEM	Value	SEM
Quality of Medical Care	*4.67	.17	*4.76	.21
Treatment Team	*4.66	.20	*4.69	.16
Patient Relations	*5.36	.17	*4.65	.17
Efficiency of Medical Care	*4.28	.16	*4.59	.15
Autonomy	*4.97	.19	*4.56	.21
Facility Support	*4.73	.15	*4.54	.13
Organization and Leadership	*4.97	.19	4.34	.20
Professional Experience	*4.62	.18	4.24	.19
Compensation	*5.18	.19	4.19	.14
Workload	*4.54	.18	3.88	.16

Note. Current Satisfaction is scaled from one to seven. One equals very dissatisfied, seven equals very satisfied. Change in satisfaction is also scaled from one to seven. One equals large decrease in satisfaction, seven equals large increase in satisfaction.

\* The number is greater than 2 standard errors of the mean away from neutral satisfaction:  $p < .05$ .



**Figure 1.** Optimized Clinics Surveyed

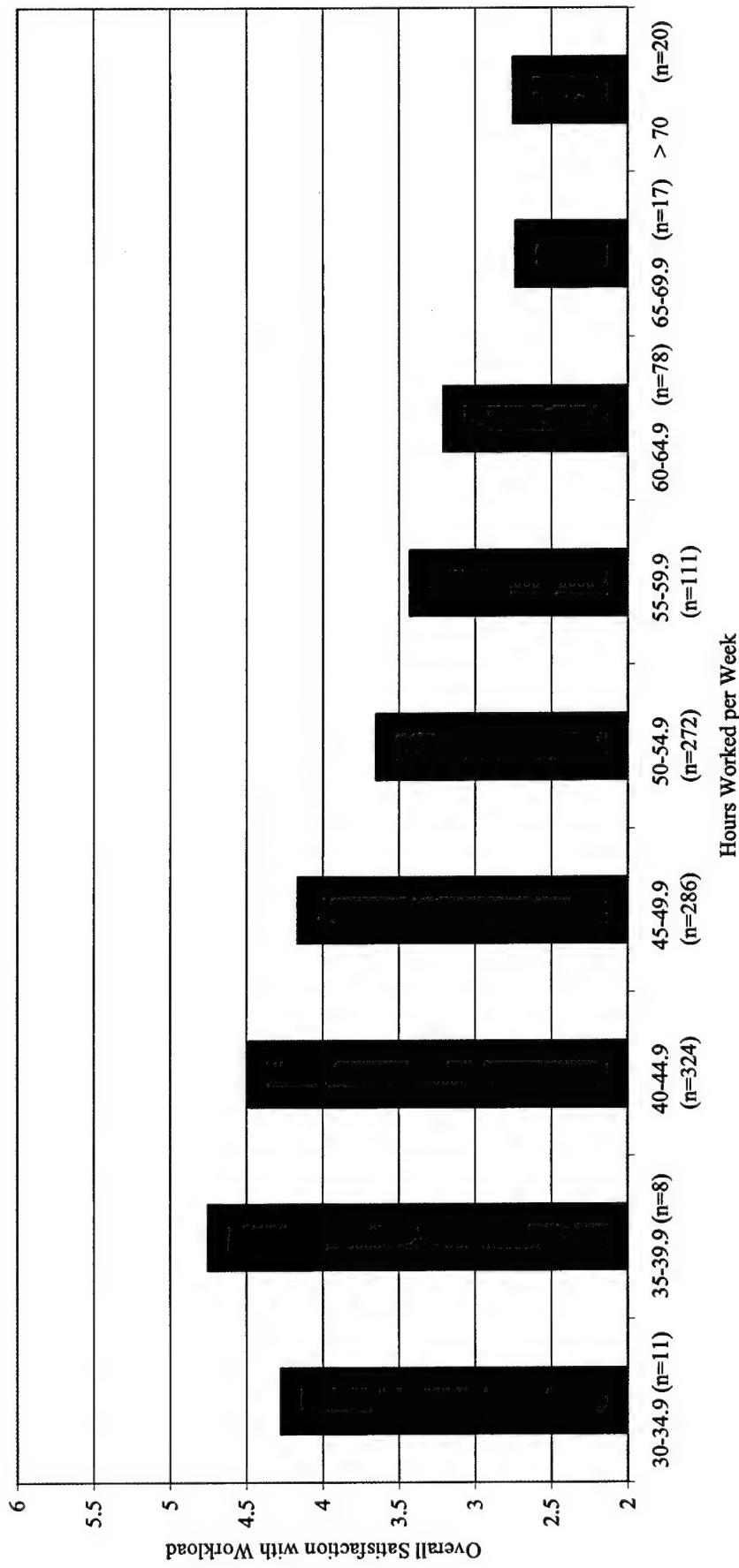
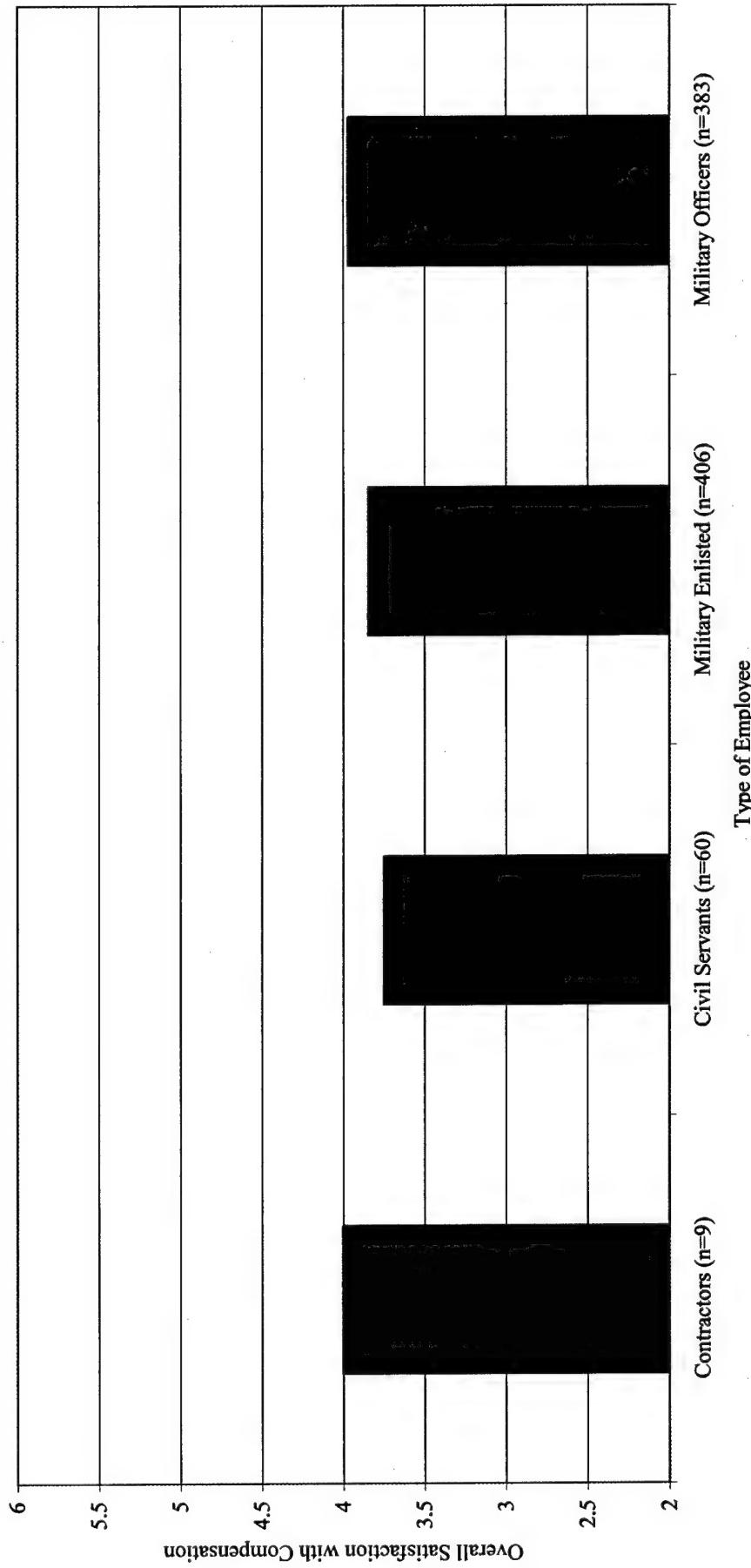
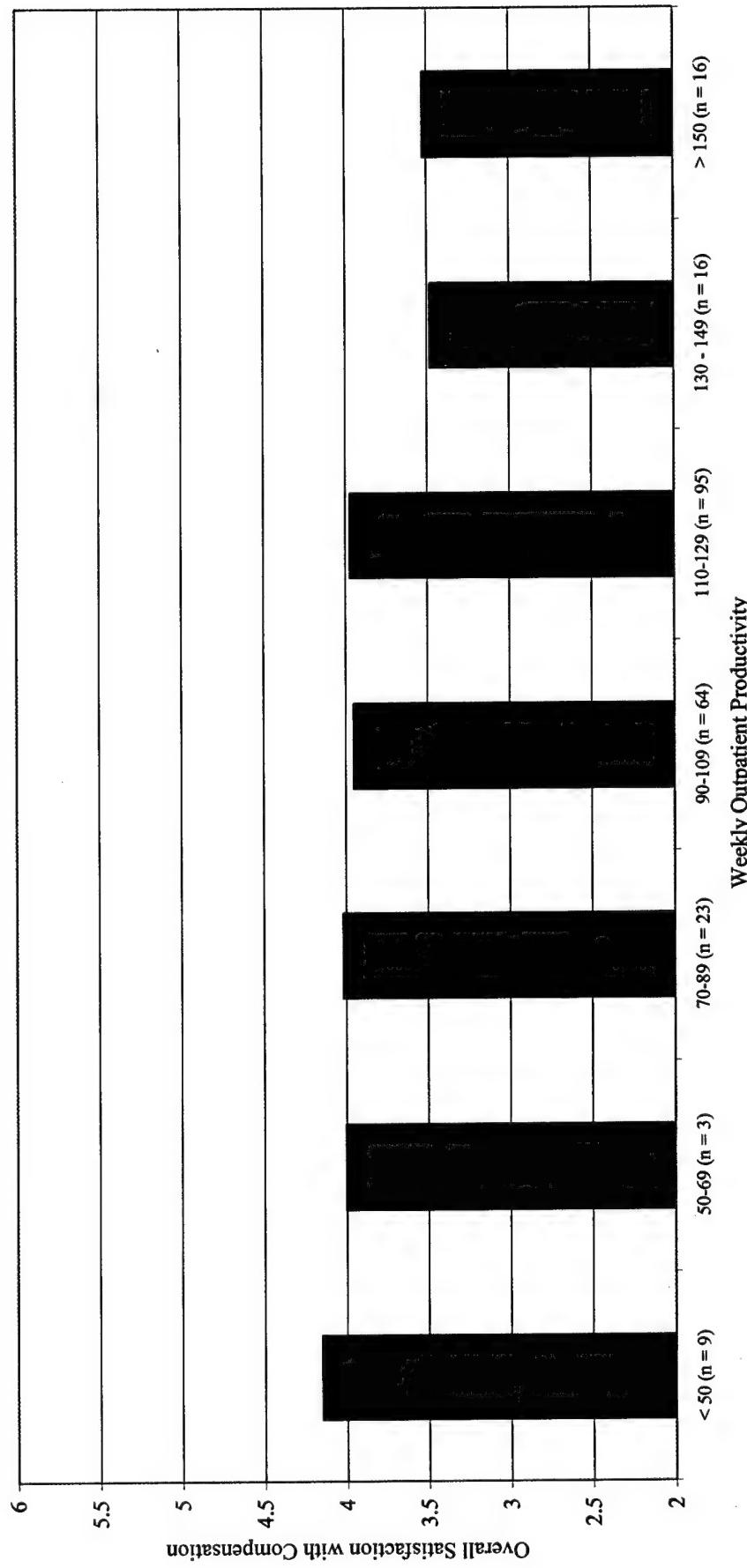


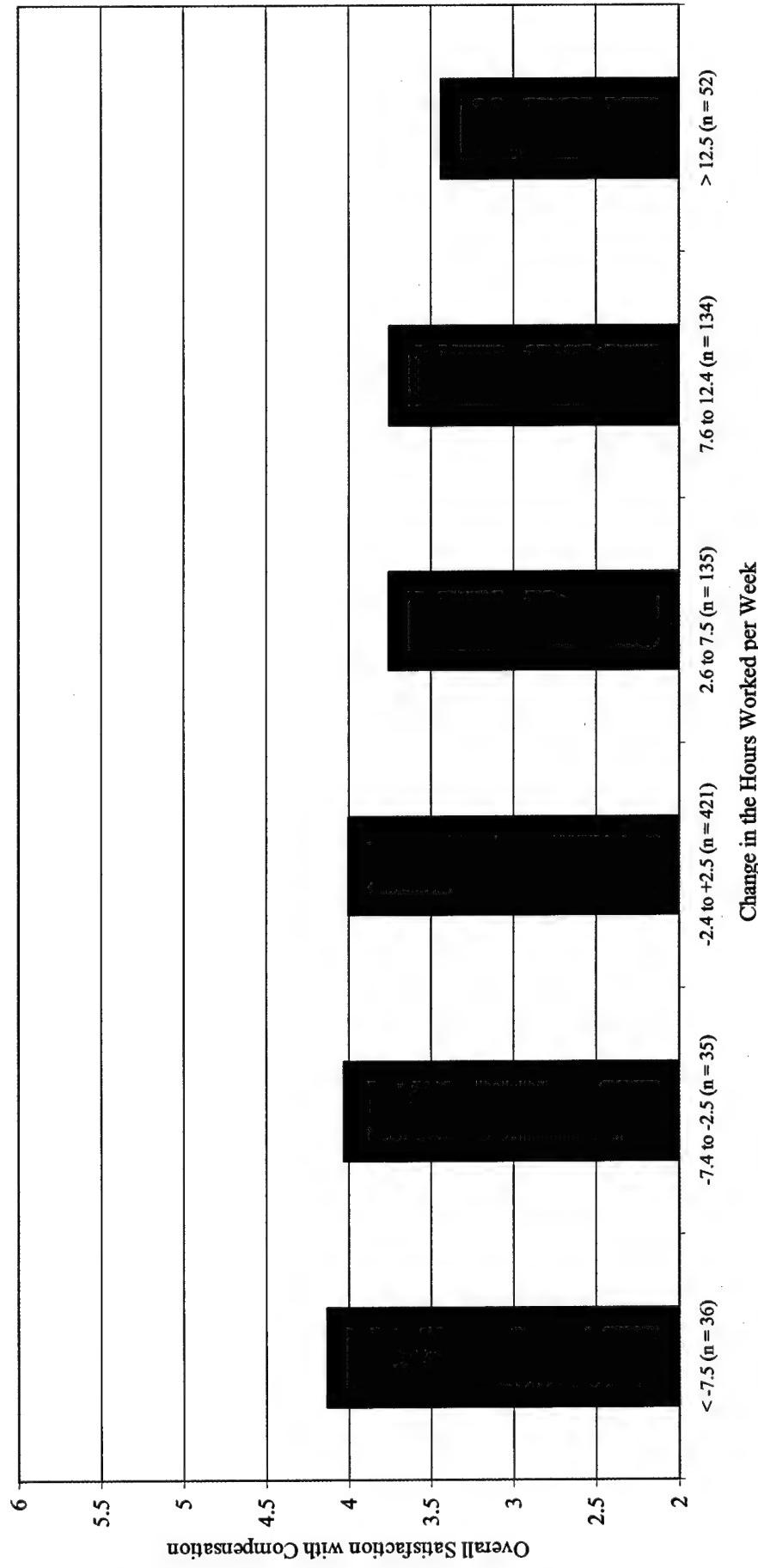
Figure 2. Overall Satisfaction with Workload Stratified by the Hours Worked per Week



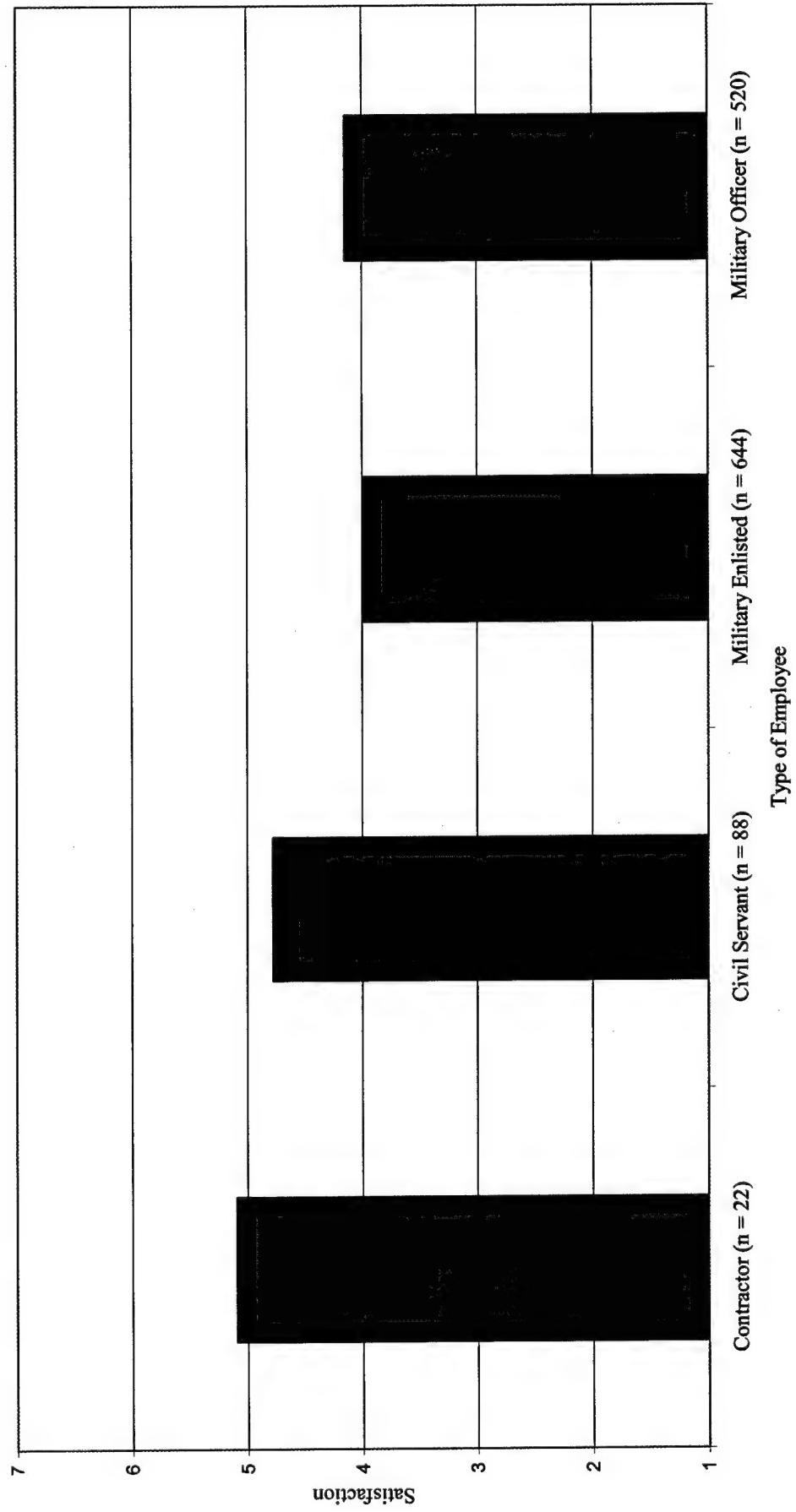
**Figure 3.** Overall Satisfaction with Compensation Stratified by Type of Employee

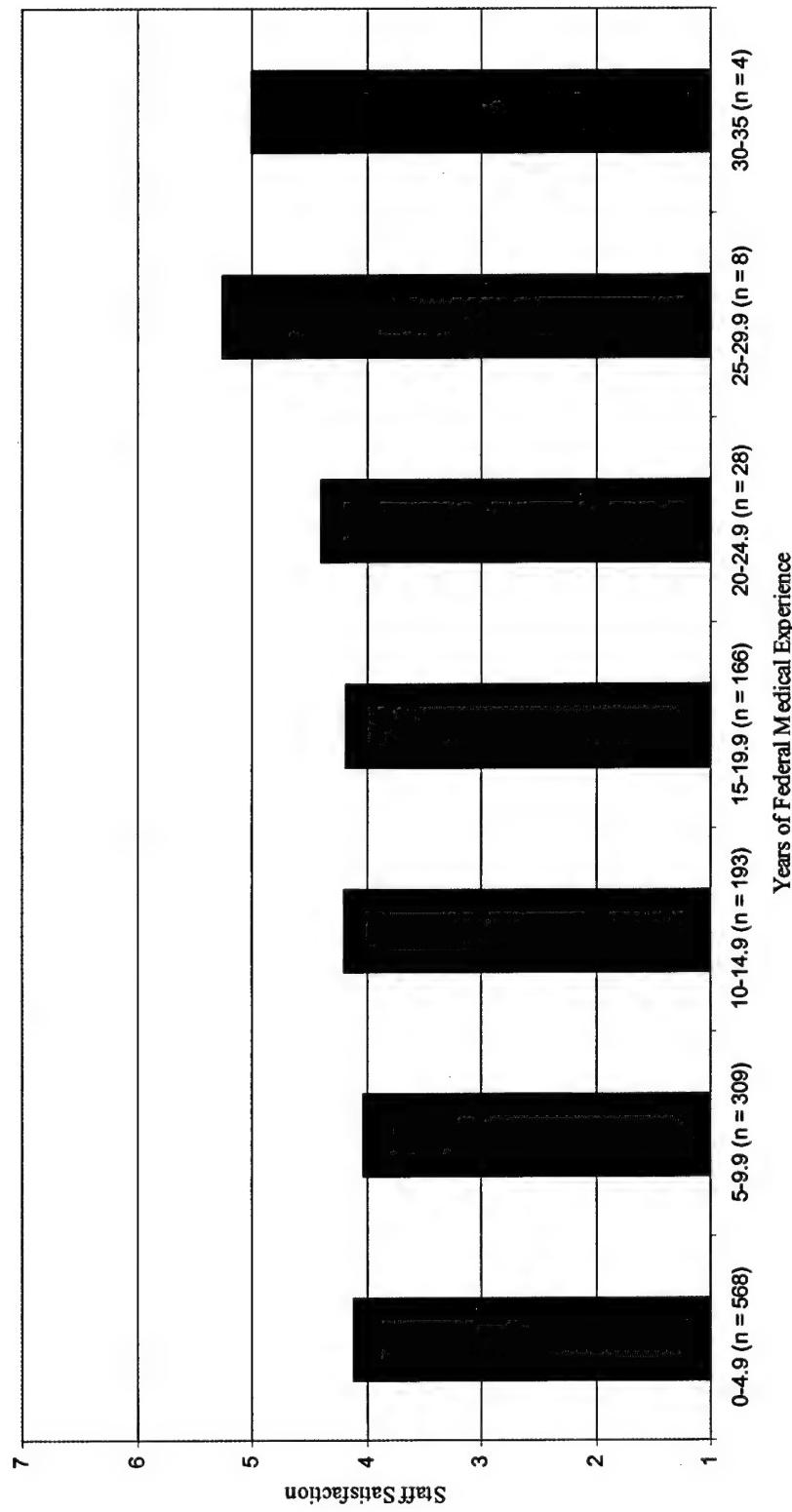


**Figure 4.** Overall Satisfaction with Compensation Stratified by Patients Seen per Week

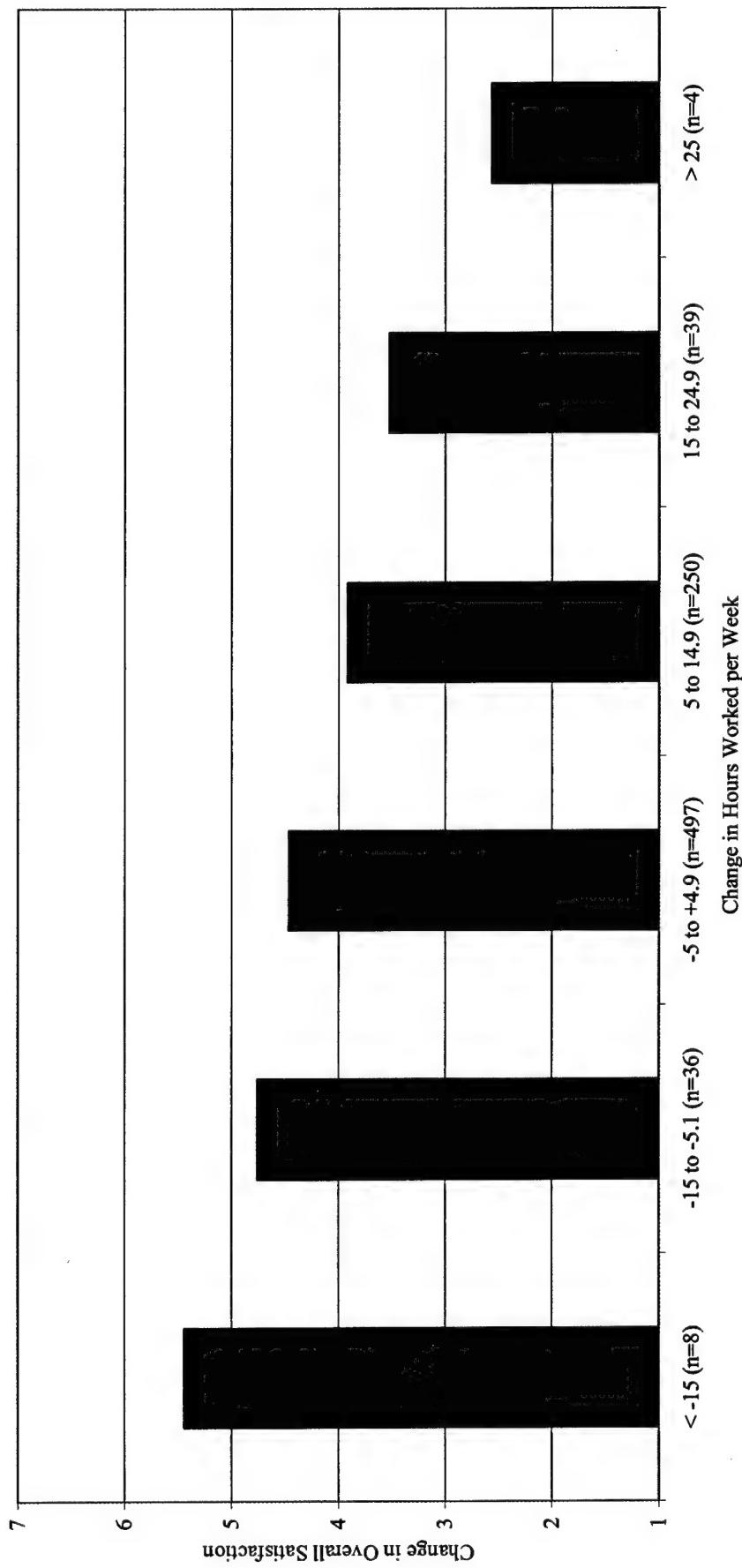


**Figure 5.** Overall Satisfaction with Compensation Stratified by the Change in the Hours Worked/Week

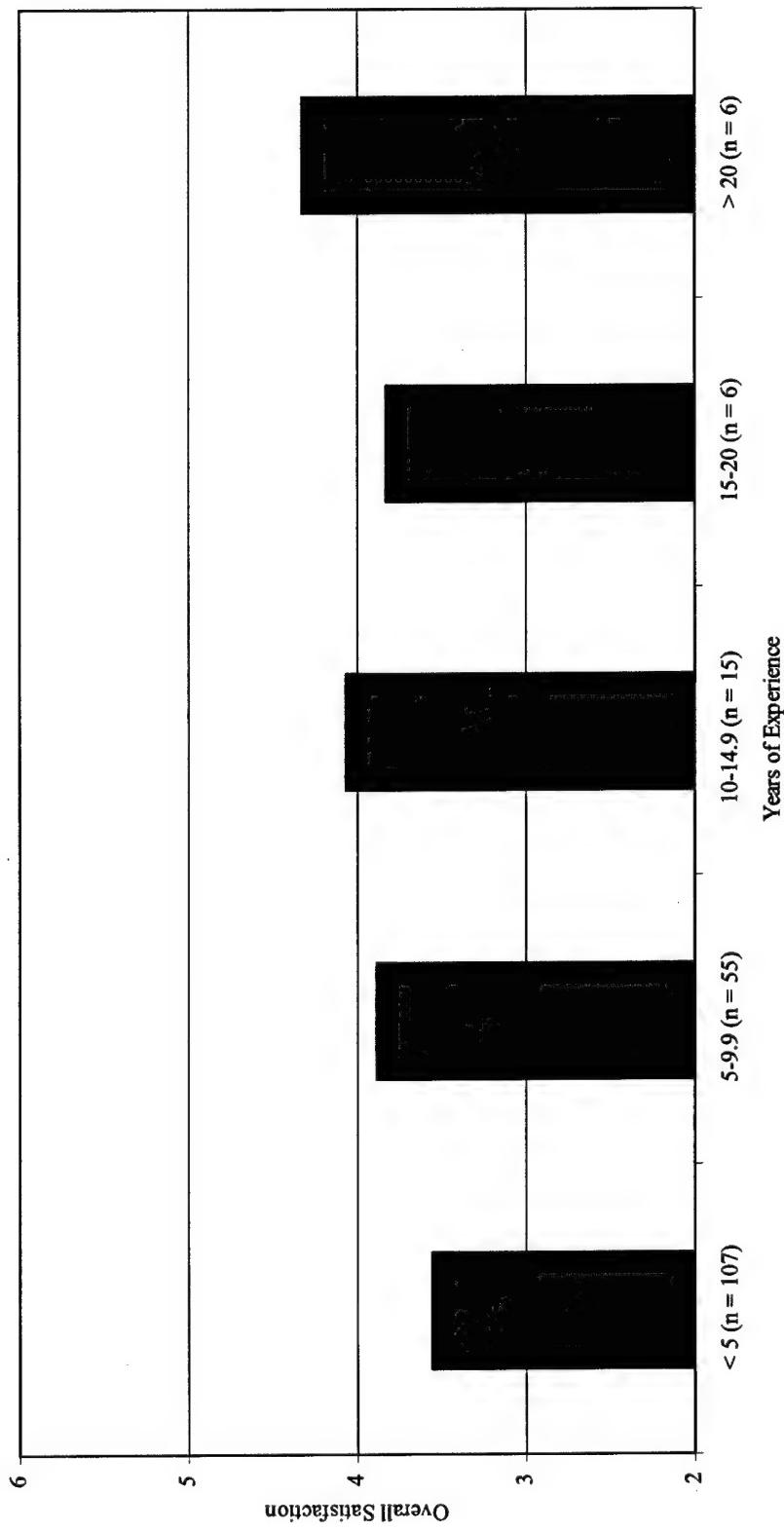




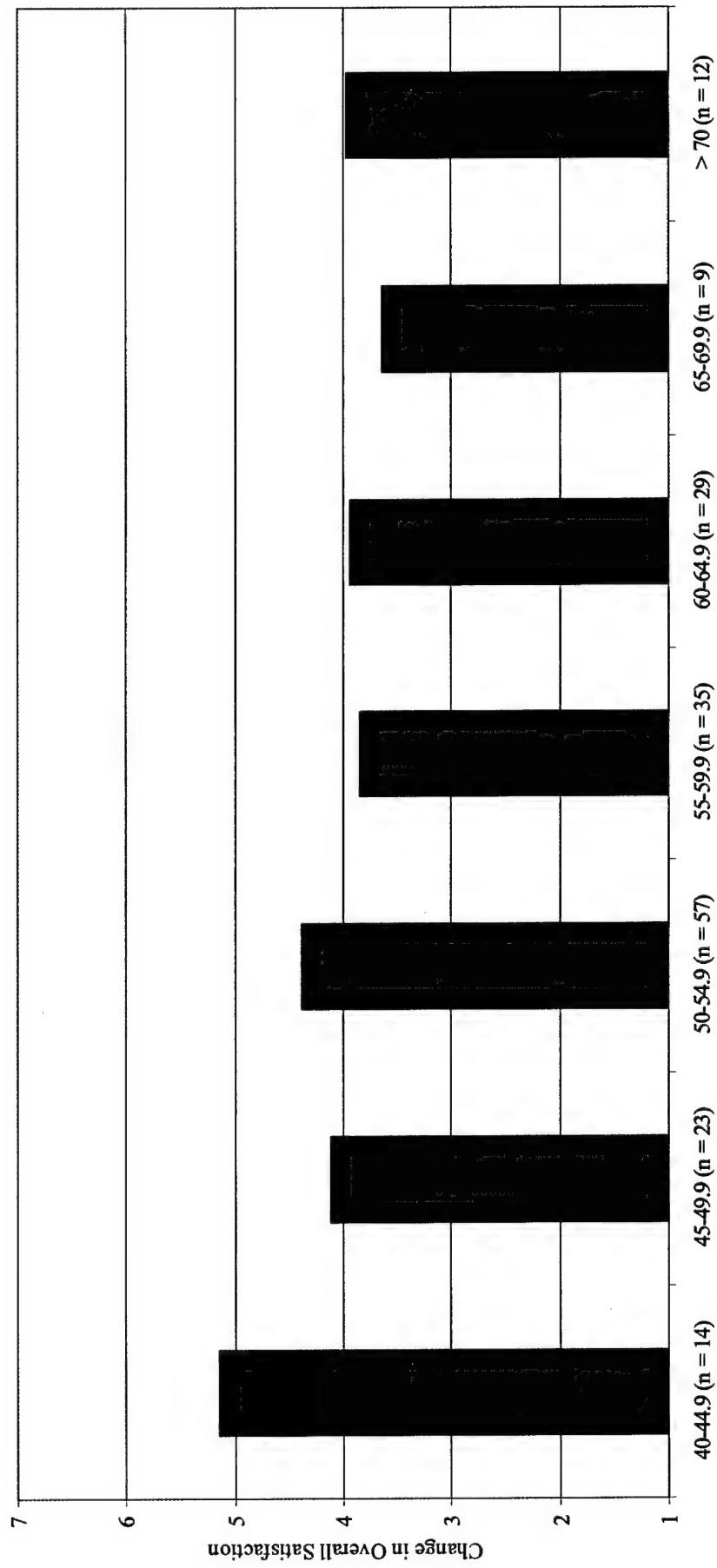
**Figure 7.** Overall Satisfaction Stratified by Total Federal Medical Experience



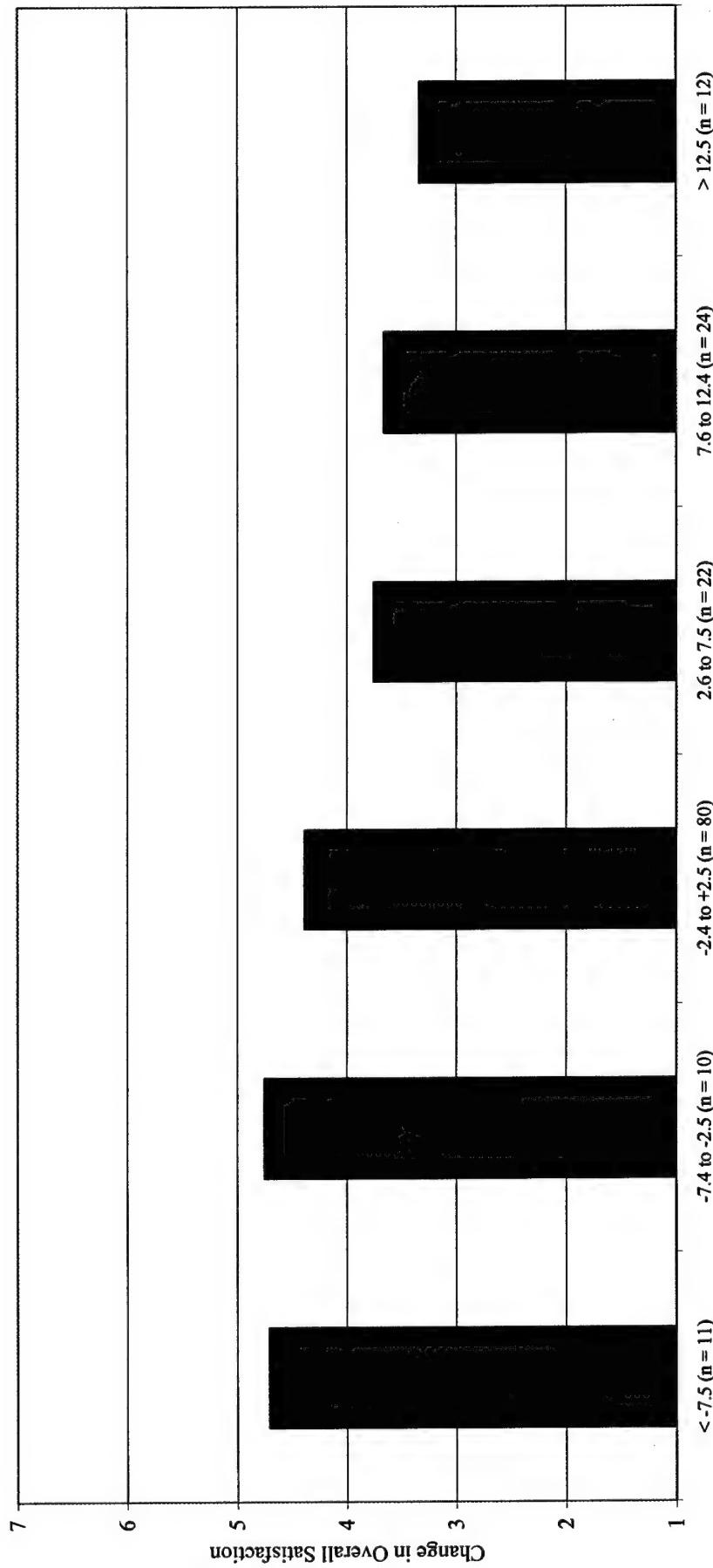
**Figure 8.** Overall Change in Staff Satisfaction Stratified by the Change in Hours Worked per Week



**Figure 9.** Physician Satisfaction Stratified by Years of Federal Medical Experience



**Figure 10.** Overall Change in Physician Satisfaction Stratified by the Hours Worked per Week



**Figure 11.** Overall Change in Physician Satisfaction Stratified by Change in the Hours Worked/Week

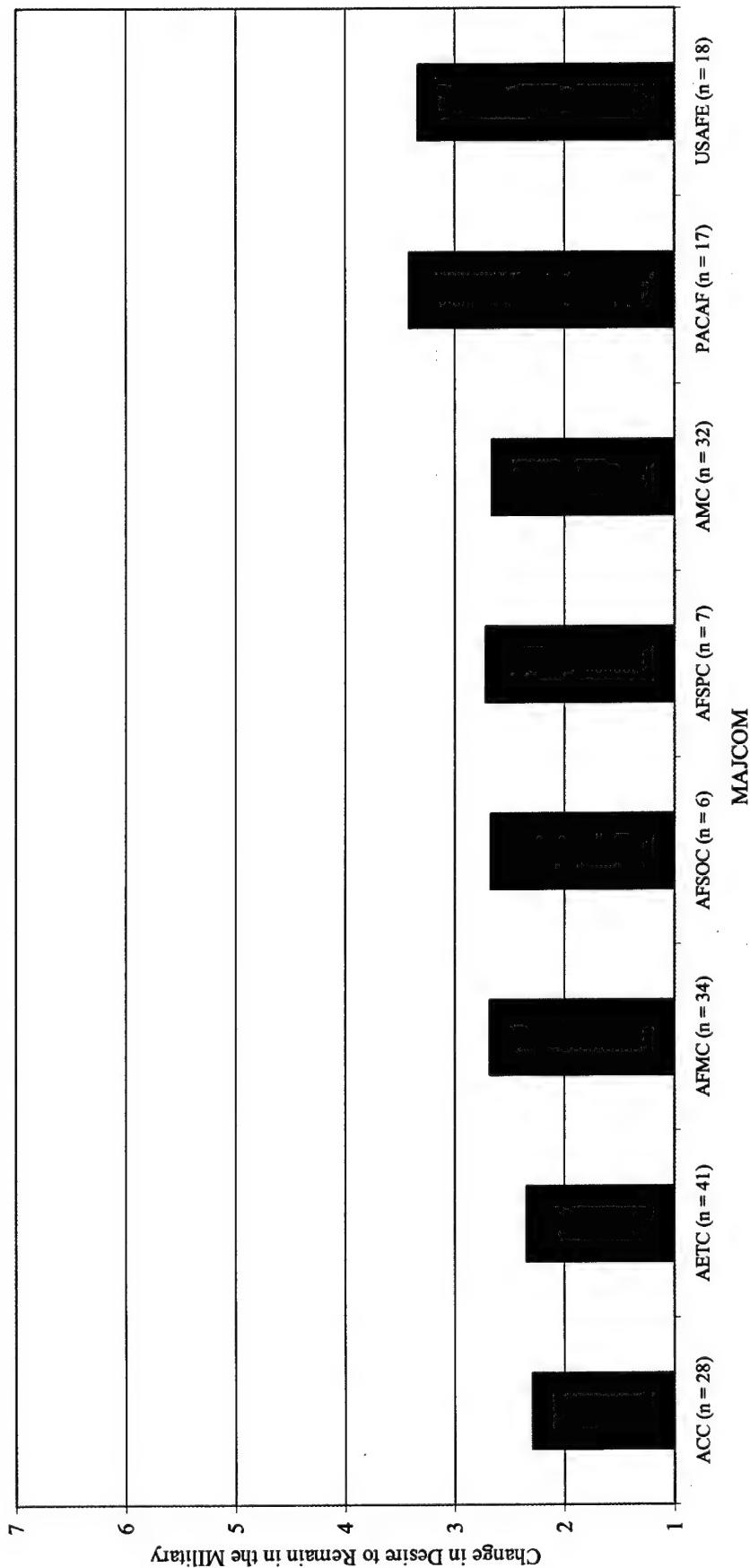
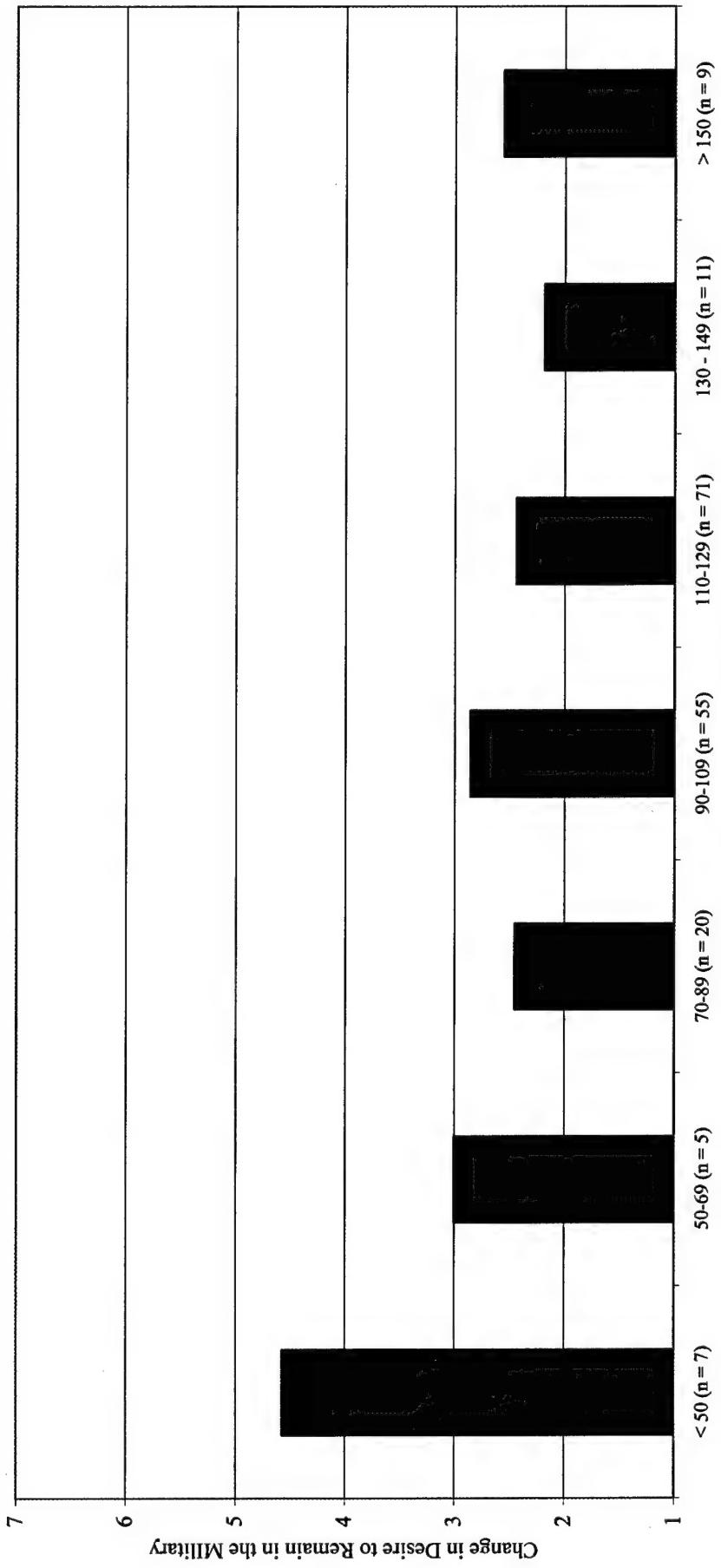
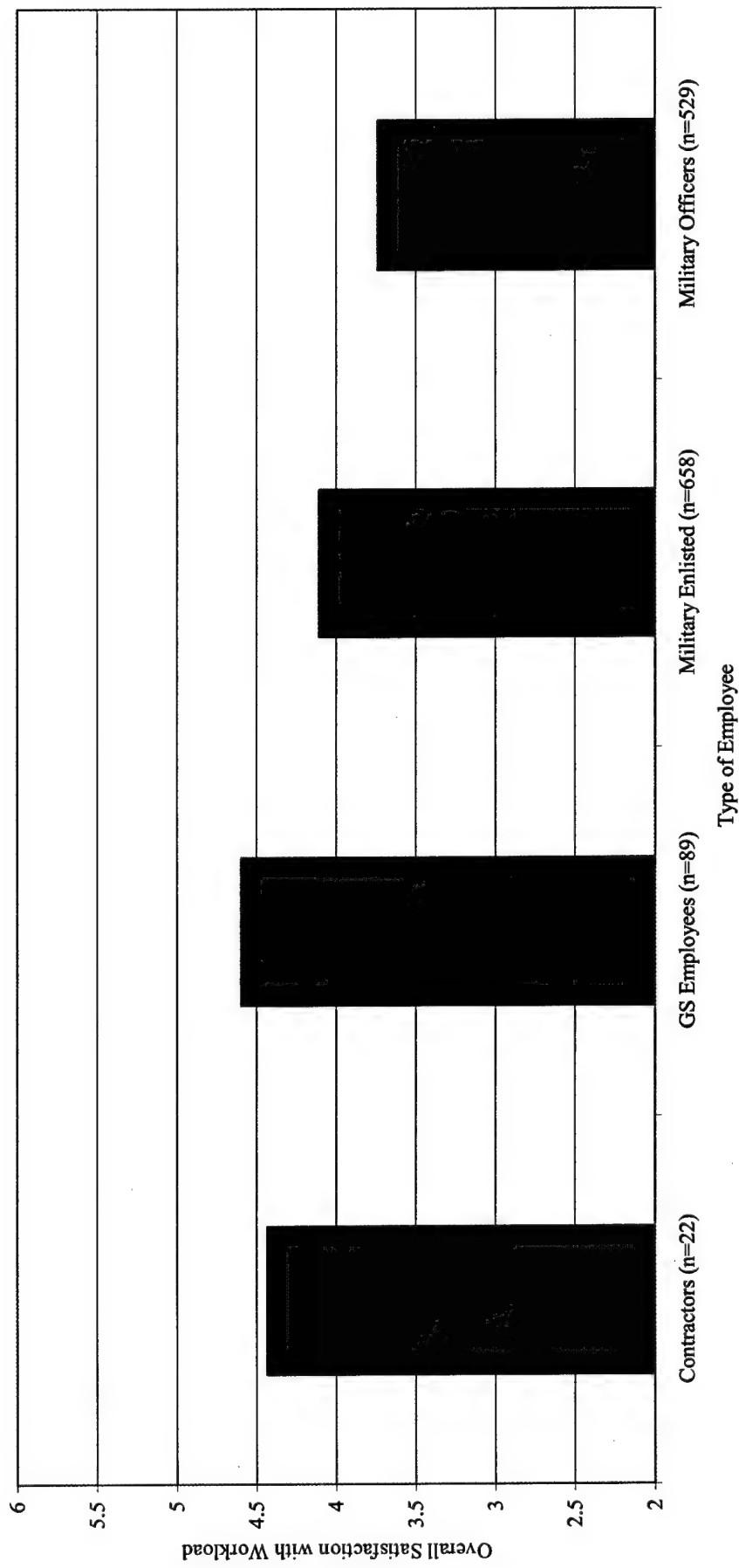


Figure 12. Overall Change in Physician Desire to Remain in Military Stratified by MAJCOM



**Figure 13.** Overall Change in Physician Desire to Remain in Military Stratified by Patients seen per week



**Figure 14.** Overall Satisfaction with Workload Stratified by the Type of Employee

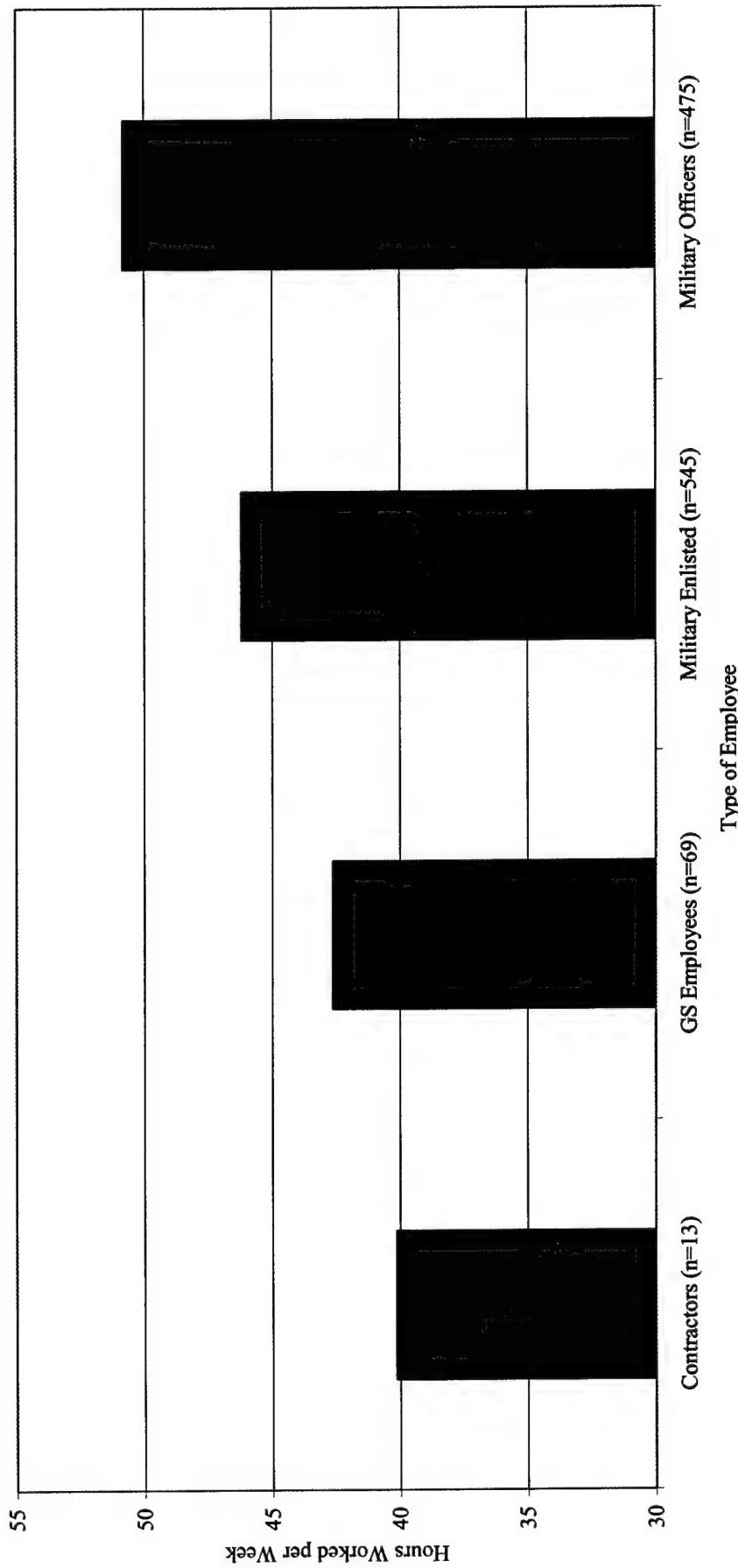


Figure 15. Hours Worked per Week Stratified by Type of Employee

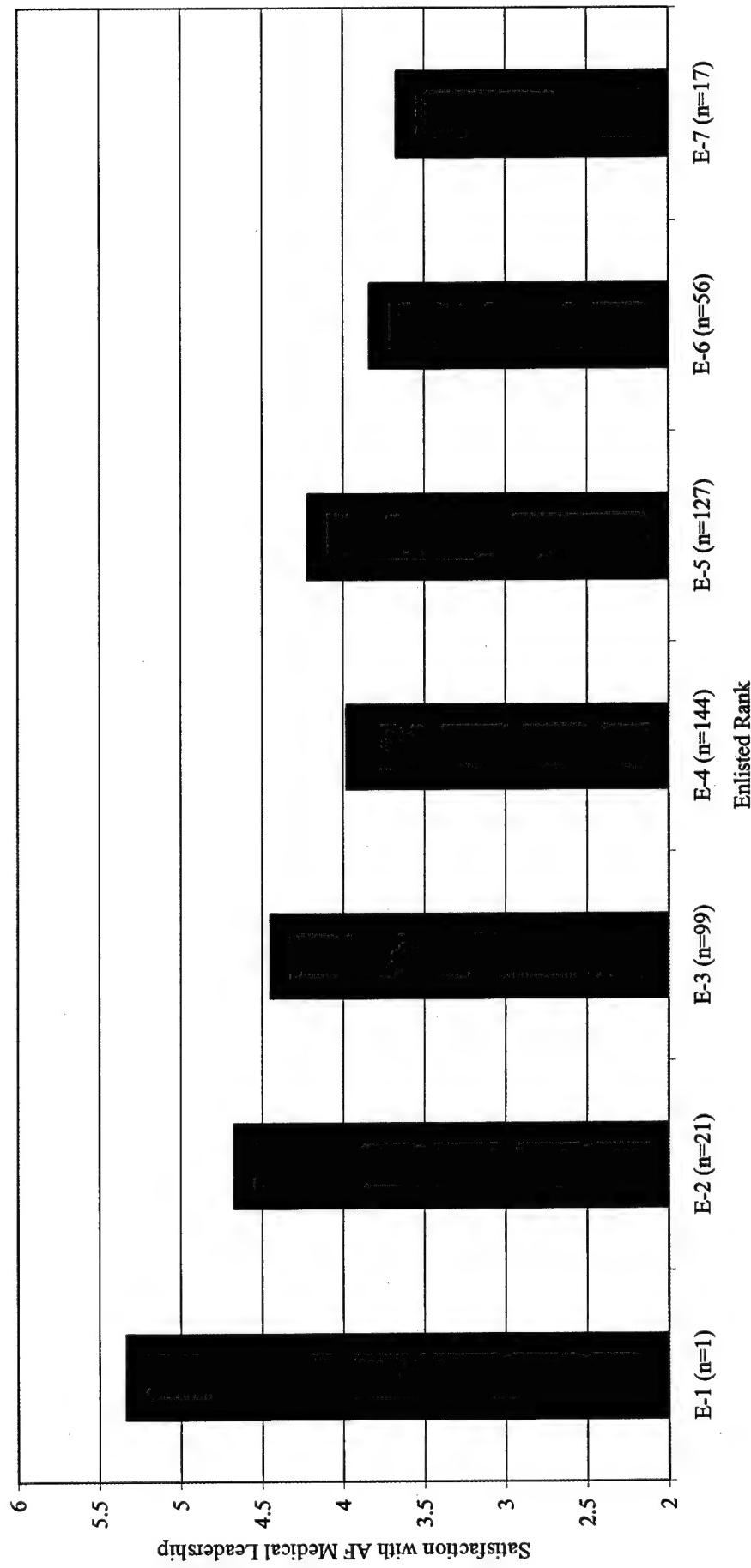


Figure 16. Satisfaction with AF Medical Leadership Stratified by the Enlisted Rank

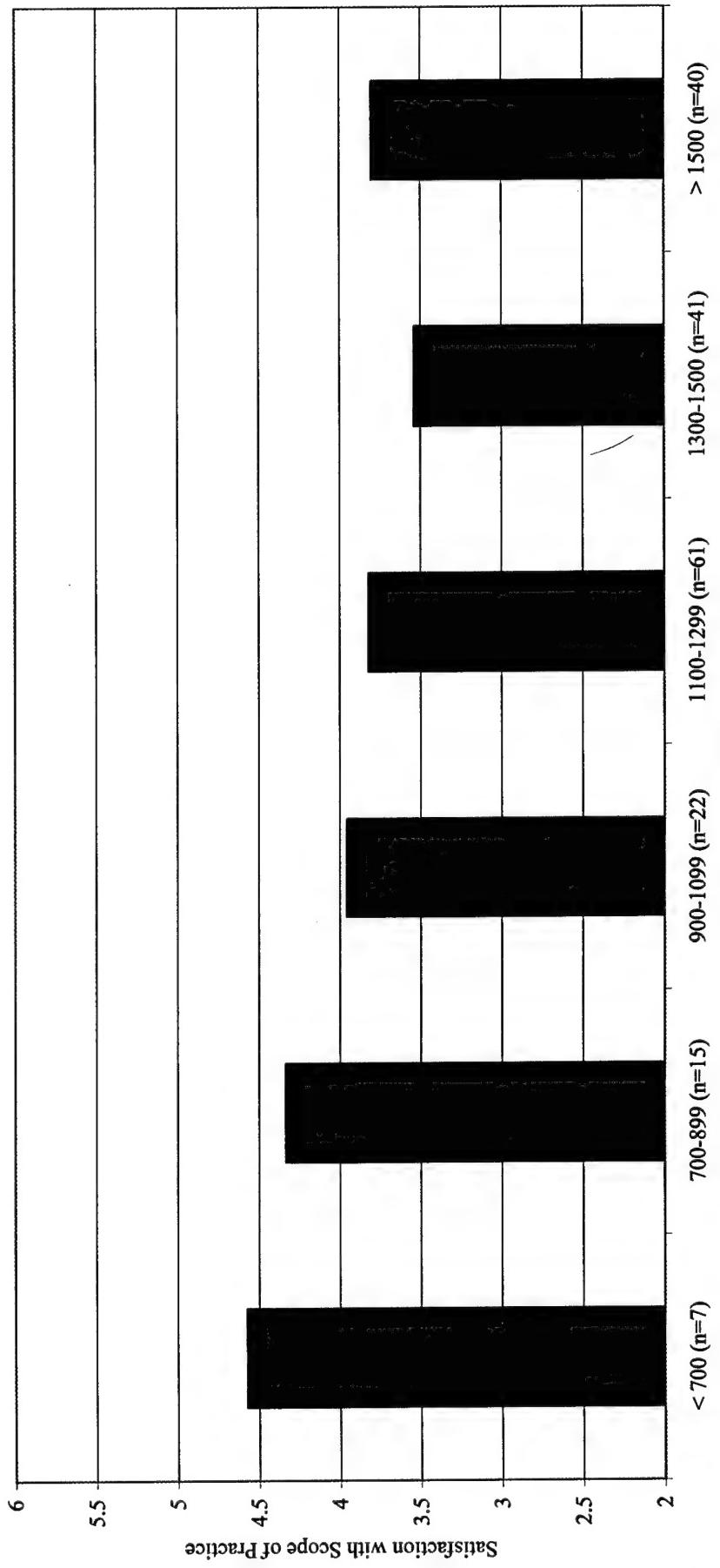


Figure 17. Physician Satisfaction with Scope of Practice Stratified by Enrollees per Provider

**Appendix A**

**Primary Care Optimization Staff Satisfaction Questionnaire**

## Provider Primary Care Optimization (PCO) Satisfaction Questionnaire

**Demographics:** To be completed by the providers. (Please check the best answer or fill in the blank)

1. How much of your time is spent in direct support of the optimized primary care clinic? \_\_\_\_\_ %
2. What is your age? \_\_\_\_\_ years
3. What is your gender?  Male  Female
4. What is your current rank/grade? GS \_\_\_\_\_  
O \_\_\_\_\_  E \_\_\_\_\_  
 Contractor
5. How many years have you worked in federal health care? \_\_\_\_\_ years
6. How many years have you worked in health care (government and civilian)? \_\_\_\_\_ years
7. How long have you worked in a clinic with optimized teams? \_\_\_\_\_ months
8. Did you work in a nonoptimized Air Force primary care clinic prior to working in your current optimized clinic?  
 yes  no  
- note: If your answer was "no" do not fill in the "before PCO" portions of the rest of the survey, nor the "change in satisfaction" portion of the satisfaction survey.
9. How many hours did you work before PCO and how many hours do you currently work on average per week? (Include call time spent in the office or hospital)

<u>Before PCO</u>	<u>After PCO</u>
_____ hours	_____ hours

10. What percentage of your time is spent in the following activities? Please estimate time usage both before and after the implementation of PCO (Total = 100%).

	<u>Before PCO</u>	<u>After PCO</u>
<b>Outpatient Care</b>	_____ %	_____ %
<b>Inpatient Care</b>	_____ %	_____ %
<b>Patient Education</b>	_____ %	_____ %
<b>Staff Training</b>	_____ %	_____ %
<b>Resident Training</b>	_____ %	_____ %
<b>Administration</b>	_____ %	_____ %
<b>Military/Readiness</b>	_____ %	_____ %
<b>Research</b>	_____ %	_____ %
<b>Other</b> _____	_____ %	_____ %

11. What is the name of the clinic where you work? \_\_\_\_\_

An optimized primary care team should have two medical technicians, one administrative technician, and one-half to one nurse per provider. Do you currently have these manpower resources in your clinic?

12. Two medical techs per provider?  <sub>1</sub> yes  <sub>2</sub> no

13. One administrative technician per provider?  <sub>1</sub> yes  <sub>2</sub> no

14. One-half nurse per provider?  <sub>1</sub> yes  <sub>2</sub> no

15. Did your clinic receive any additional manning following the implementation of PCO?

<sub>1</sub> yes  <sub>2</sub> no

16. How many exam rooms do you have for each provider? \_\_\_\_\_

17. How many treatment/procedure rooms do you have for each provider? \_\_\_\_\_

18. Did the number of treatment and exam rooms per provider increase with the implementation of PCO?

<sub>1</sub> yes  <sub>2</sub> no

19. What type of provider are you?  <sub>1</sub> M.D.  <sub>2</sub> D.O.  <sub>3</sub> N. P.  <sub>4</sub> P. A.

20. If a physician, what is your specialty?  <sub>1</sub> General Practice/No Specialty  
 <sub>2</sub> Family Practice  <sub>3</sub> Pediatrics  
 <sub>4</sub> Internal Medicine  <sub>5</sub> Other \_\_\_\_\_

21. What is the source(s) of your original military service obligation? (*check all that apply*)

<sub>1</sub> Service Academy  <sub>2</sub> ROTC  <sub>3</sub> HPSP  <sub>4</sub> USUHS  <sub>5</sub> Other \_\_\_\_\_

22. What is the average number of outpatient visits you saw per week before PCO and you currently see?

Before PCO (Oct – Dec '99)

\_\_\_\_\_ patients/week

After PCO (Oct – Dec '00)

\_\_\_\_\_ patients/week

23. If you had all of the nurses, technicians, exam rooms and other support that money could buy, how much could you increase your productivity? \_\_\_\_\_ %

**Provider Job Satisfaction** –To be completed by the providers. For all statements below please circle the number that corresponds with your change in satisfaction following the implementation of the new primary care optimization program:

Satisfaction with Work Load						
1. Satisfaction with my level of leisure time and family time	Very Dissatisfied 1    2    3    4    5    6    7	Neutral	Very Satisfied			
2. Change in satisfaction in area listed above following implementation of PCO	Large Decrease 1    2    3    4    5    6    7	No change	Large Increase			
3. Satisfaction with the pace of my work (amount of work to accomplish during the day)	Very Dissatisfied 1    2    3    4    5    6    7	Neutral	Very Satisfied			
4. Change in satisfaction in area listed above following implementation of PCO	Large Decrease 1    2    3    4    5    6    7	No change	Large Increase			

Comments:

Satisfaction with Treatment Team						
5. Satisfaction with technician support	Very Dissatisfied 1    2    3    4    5    6    7	Neutral	Very Satisfied			
6. Change in satisfaction in area listed above following implementation of PCO	Large Decrease 1    2    3    4    5    6    7	No change	Large Increase			
7. Satisfaction with nurse support	Very Dissatisfied 1    2    3    4    5    6    7	Neutral	Very Satisfied			
8. Change in satisfaction in area listed above following implementation of PCO	Large Decrease 1    2    3    4    5    6    7	No change	Large Increase			
9. Satisfaction with medical record availability	Very Dissatisfied 1    2    3    4    5    6    7	Neutral	Very Satisfied			
10. Change in satisfaction in area listed above following implementation of PCO	Large Decrease 1    2    3    4    5    6    7	No change	Large Increase			
11. Satisfaction with teamwork and interaction with treatment team members	Very Dissatisfied 1    2    3    4    5    6    7	Neutral	Very Satisfied			
12. Change in satisfaction in area listed above following implementation of PCO	Large Decrease 1    2    3    4    5    6    7	No change	Large Increase			
13. Satisfaction with the way that the treatment team works together to support each other	Very Dissatisfied 1    2    3    4    5    6    7	Neutral	Very Satisfied			
14. Change in satisfaction in area listed above following implementation of PCO	Large Decrease 1    2    3    4    5    6    7	No change	Large Increase			

Comments:

<b>Satisfaction with Facility/Equipment/Supplies</b>							
15. Satisfaction with number of exam and treatment rooms	Very Dissatisfied			Neutral		Very Satisfied	
	1	2	3	4	5	6	7
16. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
17. Satisfaction with layout of the clinic to maximize efficiency	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
18. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
19. Satisfaction with equipment and ability to procure new equipment	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
20. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
21. Satisfaction with availability of supplies	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
22. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with Practice Autonomy</b>							
23. Satisfaction with my ability to provide patient care according to my best judgment	Very Dissatisfied			Neutral		Very Satisfied	
	1	2	3	4	5	6	7
24. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
25. Satisfaction with my ability to initiate changes in the way work is done in the clinic	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
26. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
27. Satisfaction with my ability to make changes in my work schedule if needed	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
28. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7

Comments:

Satisfaction with my Organization						
	Very Dissatisfied	Neutral	Very Satisfied			
	1	2	3	4	5	6
29. Satisfaction with the emphasis that local leadership places on primary care	Large Decrease	No change	Large Increase			
30. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6
31. Satisfaction with local medical leadership	Very Dissatisfied	Neutral	Very Satisfied			
32. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6
33. Satisfaction with Air Force medical leadership	Very Dissatisfied	Neutral	Very Satisfied			
34. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change	Large Increase			
	1	2	3	4	5	6

Comments:

Satisfaction with my Professional Experience						
	Very Dissatisfied	Neutral	Very Satisfied			
	1	2	3	4	5	6
35. Satisfaction with my interaction with consultant physicians (telephone and written)	Large Decrease	No change	Large Increase			
36. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6
37. Satisfaction with my ability to discuss interesting/challenging cases with other providers	Very Dissatisfied	Neutral	Very Satisfied			
38. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6
39. Satisfaction with the training I receive to care for patients efficiently	Very Dissatisfied	Neutral	Very Satisfied			
40. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6
41. Satisfaction with my scope of practice (ability to schedule procedures and care for more complicated patients)	Large Decrease	No change	Large Increase			
42. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6
43. Satisfaction with my ability to participate in meaningful teaching activities	Very Dissatisfied	Neutral	Very Satisfied			
44. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6

Comments:

Satisfaction with my Patient Relationships								
	Very Dissatisfied			Neutral	Very Satisfied			
	1	2	3	4	5	6	7	
45. Satisfaction that my patients appreciate the work I do for them	Large Decrease	1	2	3	No change	5	6	7
46. Change in satisfaction in area listed above following implementation of PCO	Large Increase	1	2	3	4	5	6	7
47. Satisfaction with the contribution I make to the lives of my patients	Very Dissatisfied	1	2	3	Neutral	5	6	7
48. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	1	2	3	No change	5	6	7
49. Satisfaction with my current relationships with my patients	Very Dissatisfied	1	2	3	Neutral	5	6	7
50. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	1	2	3	No change	5	6	7

Comments:

Satisfaction with Treatment Team Efficiency								
	Very Dissatisfied			Neutral	Very Satisfied			
	1	2	3	4	5	6	7	
51. Satisfaction that the patients do not waste time accessing and receiving medical care	Large Decrease	1	2	3	No change	5	6	7
52. Change in satisfaction in area listed above following implementation of PCO	Large Increase	1	2	3	4	5	6	7
53. Satisfaction with the amount of time that I spend in activities not related to patient care	Very Dissatisfied	1	2	3	Neutral	5	6	7
54. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	1	2	3	No change	5	6	7
55. Satisfaction with overall treatment team efficiency	Very Dissatisfied	1	2	3	Neutral	5	6	7
56. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	1	2	3	No change	5	6	7

Comments:

<b>Satisfaction with the Quality of Medical Care</b>							
57. Satisfaction with access to data reflecting the demographics and health status of the enrolled population	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
58. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
59. Satisfaction with the amount of time that I have to take care of my patient	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
60. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
61. Satisfaction with the continuity of care that the patients receive	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
62. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
63. Satisfaction with the overall quality of medical care that is provided	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
64. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with my Pay and Opportunities for Advancement</b>							
65. Satisfaction with my pay and other benefits	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
66. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
67. Satisfaction with my prospects for promotion	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
68. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
69. Satisfaction with my opportunities for recognition and awards	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
70. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7

Comments:

<b>Overall Satisfaction</b>							
71. Overall satisfaction with my current position in military medicine	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
72. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7

Comments:

73. With your current knowledge, if you were not in a clinic that is involved in optimization and had the option to accept a position, what would you decide?	Definitely Wouldn't Accept Position		Neutral or Uncertain		Definitely Would Accept Position		
	1	2	3	4	5	6	7
74. If a friend of yours of your specialty told you they were interested in a position in an optimized clinic, what would you tell them?	Definitely Wouldn't Recommend Position		Neutral or Uncertain		Definitely Would Recommend Position		
	1	2	3	4	5	6	7
75. Do you plan to separate from the Air Force (or quit your position) at your next opportunity?	Definitely		Neutral		Definitely Not		
	1	2	3	4	5	6	7
76. Are you currently more or less likely to leave the Air Force at the next opportunity because of primary care optimization?	Much Less Likely to Separate		Neutral or Uncertain		Much More Likely to Separate		
	1	2	3	4	5	6	7

Comments:

## Nurse Primary Care Optimization (PCO) Satisfaction Questionnaire

**Demographics:** To be completed by all nurses assigned to PCO teams. All responses will be grouped and compared in their aggregate to assure anonymity. (Please check the best answer or fill in the blank)

1. How much of your time is spent in direct support of the optimized primary care clinic? \_\_\_\_\_ %
2. What is your age? \_\_\_\_\_ years
3. What is your gender?  Male  Female
4. What is your current rank/grade? GS \_\_\_\_\_  
O \_\_\_\_\_  E \_\_\_\_\_  
 Contractor
5. How many years have you worked in federal health care? \_\_\_\_\_ years
6. How many years have you worked in health care (government and civilian)? \_\_\_\_\_ years
7. How long have you worked in a clinic with optimized teams? \_\_\_\_\_ months
8. Did you work in a nonoptimized Air Force primary care clinic prior to working in your current optimized clinic?  
 yes  no

- note: If your answer was "no" do not fill in the "before PCO" portions of the rest of the survey, nor the "change in satisfaction" portion of the satisfaction survey.

9. How many hours did you work before PCO and how many hours do you currently work on average per week? (Include call time spent in the office or hospital)

Before PCO	After PCO
_____ hours	_____ hours

10. What percentage of your time is spent in the following activities? Please estimate time usage both before and after the implementation of PCO (Total = 100%).

	<u>Before PCO</u>	<u>After PCO</u>
Patient Care	_____ %	_____ %
Patient Education	_____ %	_____ %
Staff Training	_____ %	_____ %
Resident Training	_____ %	_____ %
Administration	_____ %	_____ %
Military/Readiness	_____ %	_____ %
Research	_____ %	_____ %
Other _____	_____ %	_____ %

11. What is the name of the clinic where you work? \_\_\_\_\_

An optimized primary care team should have two medical technicians, one administrative technician, and one-half to one nurse per provider. Do you currently have these manpower resources in your clinic?

12. Two medical techs per provider?       yes       no

13. One administrative technician per provider?       yes       no

14. One-half nurse per provider?       yes       no

15. Did your clinic receive any additional manning following the implementation of PCO?

yes       no

16. How many exam rooms do you have for each provider? \_\_\_\_\_

17. How many treatment/procedure rooms do you have for each provider? \_\_\_\_\_

18. Did the number of treatment and exam rooms per provider increase with the implementation

**Nurse Job Satisfaction** —To be completed by all nurses on the PCO teams. *For all statements below please circle the number that corresponds with your current satisfaction and your change in satisfaction following the implementation of the new primary care optimization program. All responses will be grouped and compared in their aggregate to assure anonymity.*

Satisfaction with Work Load								
1. Satisfaction with my level of leisure time and family time	Very Dissatisfied			Neutral		Very Satisfied		
	1	2	3	4	5	6	7	
2. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase		
3. Satisfaction with the pace of my work (amount of work to accomplish during the day)	Very Dissatisfied			Neutral		Very Satisfied		
4. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase		
	1	2	3	4	5	6	7	

Comments:

Satisfaction with Treatment Team								
5. Satisfaction with teamwork and interaction with treatment team members	Very Dissatisfied			Neutral		Very Satisfied		
	1	2	3	4	5	6	7	
6. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase		
7. Satisfaction with the way that the treatment team works together to support each other	Very Dissatisfied			Neutral		Very Satisfied		
8. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase		
	1	2	3	4	5	6	7	

Comments:

Satisfaction with Facility/Equipment/Supplies						
	Very Dissatisfied	Neutral		Very Satisfied		
		1	2	3	4	5
9. Satisfaction with number of exam and treatment rooms	Large Decrease	1	2	3	4	5
10. Change in satisfaction in area listed above following implementation of PCO	No change	6	7	Large Increase	5	6
11. Satisfaction with layout of the clinic to maximize efficiency	Very Dissatisfied	1	2	3	4	5
12. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	6	7	Large Increase	1	2
13. Satisfaction with equipment and ability to procure new equipment	Very Dissatisfied	1	2	3	4	5
14. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	6	7	Large Increase	1	2
15. Satisfaction with availability of supplies	Very Dissatisfied	1	2	3	4	5
16. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	6	7	Large Increase	1	2

Comments:

Satisfaction with Practice Autonomy						
	Very Dissatisfied	Neutral		Very Satisfied		
		1	2	3	4	5
17. Satisfaction with my ability to initiate changes in the way work is done in the clinic	Large Decrease	1	2	3	4	5
18. Change in satisfaction in area listed above following implementation of PCO	No change	6	7	Large Increase	1	2
19. Satisfaction with my ability to make changes in my work schedule if needed	Very Dissatisfied	1	2	3	4	5
20. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	6	7	Large Increase	1	2

Comments:

<b>Satisfaction with my Organization</b>							
21. Satisfaction with the emphasis that local leadership places on primary care	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
22. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7
23. Satisfaction with local medical leadership	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
24. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7
25. Satisfaction with Air Force medical leadership	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
26. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with my Professional Experience</b>							
27. Satisfaction with my ability to discuss interesting/challenging cases with other nurses	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
28. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7
29. Satisfaction with the training that I receive to perform my duties	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
30. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7
31. Satisfaction with my scope of practice	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
32. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with my Patient Relationships</b>						
	Very Dissatisfied	Neutral		Very Satisfied		
		1	2	3	4	5
33. Satisfaction that the patients appreciate the work I do for them	Large Decrease	1	2	3	4	5
34. Change in satisfaction in area listed above following implementation of PCO	No change	6	7	Large Increase	1	2
35. Satisfaction with the contribution I make to the lives of the patients	Very Dissatisfied	1	2	3	4	5
36. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	6	7	No change	Large Increase	1
	1	2	3	4	5	6
	7					

Comments:

<b>Satisfaction with Treatment Team Efficiency</b>						
	Very Dissatisfied	Neutral		Very Satisfied		
		1	2	3	4	5
37. Satisfaction that the patients do not waste time accessing and receiving medical care	Large Decrease	1	2	3	4	5
38. Change in satisfaction in area listed above following implementation of PCO	No change	6	7	Large Increase	1	2
39. Satisfaction with overall treatment team efficiency	Very Dissatisfied	1	2	3	4	5
40. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	6	7	No change	Large Increase	1
	1	2	3	4	5	6
	7					

Comments:

<b>Satisfaction with the Quality of Medical Care</b>								
		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
41.	Satisfaction with access to data reflecting the demographics and health status of the enrolled population							
42.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
43.	Satisfaction with the continuity of care that the patients receive	Very Dissatisfied		Neutral		Very Satisfied		
44.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
45.	Satisfaction with the overall quality of medical care that is provided	Very Dissatisfied		Neutral		Very Satisfied		
46.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		

**Comments:**

<b>Satisfaction with my Pay and Opportunities for Advancement</b>								
		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
47.	Satisfaction with my pay and other benefits							
48.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
49.	Satisfaction with my prospects for promotion	Very Dissatisfied		Neutral		Very Satisfied		
50.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
51.	Satisfaction with my opportunities for recognition and awards	Very Dissatisfied		Neutral		Very Satisfied		
52.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		

**Comments:**

Overall Satisfaction										
	Very Dissatisfied	Neutral	Very Satisfied	1	2	3	4	5	6	7
53. Overall satisfaction with my current position in military medicine										
54. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change	Large Increase	1	2	3	4	5	6	7

Comments:

55. With your current knowledge, if you were not in a clinic that is involved in optimization and had the option to accept a position, what would you decide?	Definitely Wouldn't Accept Position	Neutral or Uncertain	Definitely Would Accept Position	1	2	3	4	5	6	7
56. If a nurse friend of yours told you they were interested in a position in an optimized clinic, what would you tell them?	Definitely Wouldn't Recommend Position	Neutral or Uncertain	Definitely Would Recommend Position	1	2	3	4	5	6	7
57. Do you plan to separate from the Air Force (or quit your position) at your next opportunity?	Definitely	Neutral	Definitely Not	1	2	3	4	5	6	7
58. Are you currently more or less likely to leave the Air Force at the next opportunity because of primary care optimization?	Much Less Likely to Separate	Neutral or Uncertain	Much More Likely to Separate	1	2	3	4	5	6	7

Comments:

## Group Practice Manager PCO Satisfaction Questionnaire

**Demographics:** To be completed by all administrators assigned to PCO teams. All responses will be grouped and compared in their aggregate to assure anonymity. (Please check the best answer or fill in the blank)

1. How much of your time is spent in direct support of the optimized primary care clinic? \_\_\_\_\_ %
2. What is your age? \_\_\_\_\_ years
3. What is your gender?  Male  Female
4. What is your current rank/grade? GS \_\_\_\_\_  
O \_\_\_\_\_ E \_\_\_\_\_  
**Contractor**
5. How many years have you worked in federal health care? \_\_\_\_\_ years
6. How many years have you worked in health care (government and civilian)? \_\_\_\_\_ years
7. How long have you worked in a clinic with optimized teams? \_\_\_\_\_ months
8. Did you work in a nonoptimized Air Force primary care clinic prior to working in your current optimized clinic?  
 yes  no

- note: If your answer was "no" do not fill in the "before PCO" portions of the rest of the survey, nor the "change in satisfaction" portion of the satisfaction survey.

9. How many hours did you work before PCO and how many hours do you currently work on average per week? (Include call time spent in the office or hospital)

<u>Before PCO</u>	<u>After PCO</u>
_____ hours	_____ hours

10. What percentage of your time is spent in the following activities? Please estimate time usage both before and after the implementation of PCO (Total = 100%).

	<u>Before PCO</u>	<u>After PCO</u>
Patient Care	_____ %	_____ %
Patient Education	_____ %	_____ %
Staff Training	_____ %	_____ %
Resident Training	_____ %	_____ %
Administration	_____ %	_____ %
Military/Readiness	_____ %	_____ %
Research	_____ %	_____ %
Other _____	_____ %	_____ %

11. What is the name of the clinic where you work? \_\_\_\_\_

An optimized primary care team should have two medical technicians, one administrative technician, and one-half to one nurse per provider. Do you currently have these manpower resources in your clinic?

12. Two medical techs per provider?       **yes**       **no**

13. One administrative technician per provider?       **yes**       **no**

14. One-half nurse per provider?       **yes**       **no**

15. Did your clinic receive any additional manning following the implementation of PCO?

**yes**       **no**

16. How many exam rooms do you have for each provider? \_\_\_\_\_

17. How many treatment/procedure rooms do you have for each provider? \_\_\_\_\_

18. Did the number of treatment and exam rooms per provider increase with the implementation of PCO?

**yes**       **no**

**Group Practice Manager Job Satisfaction** –To be completed by all administrators on the PCO teams. For all statements below please circle the number that corresponds with your **current satisfaction** and your **change in satisfaction** following the implementation of the new primary care optimization program. All responses will be grouped and compared in their aggregate to assure anonymity.

Satisfaction with Work Load						
	Very Dissatisfied			Neutral	Very Satisfied	
	1	2	3	4	5	6 7
1. Satisfaction with my level of leisure time and family time						
2. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase
3. Satisfaction with the pace of my work (amount of work to accomplish during the day)	Very Dissatisfied			Neutral		Very Satisfied
4. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase

Comments:

Satisfaction with Treatment Team						
	Very Dissatisfied			Neutral	Very Satisfied	
	1	2	3	4	5	6 7
5. Satisfaction with teamwork and interaction with treatment team members						
6. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase
7. Satisfaction with the way that the treatment team works together to support each other	Very Dissatisfied			Neutral		Very Satisfied
8. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase

Comments:

Satisfaction with Facility/Equipment/Supplies								
		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
9.	Satisfaction with number of exam and treatment rooms	Large Decrease	1	2	3	No change	5	Large Increase 6 7
10.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
11.	Satisfaction with layout of the clinic to maximize efficiency	Very Dissatisfied	1	2	3	Neutral	5	Very Satisfied 6 7
12.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease	1	2	3	No change	5	Large Increase 6 7
13.	Satisfaction with equipment and ability to procure new equipment	Very Dissatisfied	1	2	3	Neutral	5	Very Satisfied 6 7
14.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease	1	2	3	No change	5	Large Increase 6 7
15.	Satisfaction with availability of supplies	Very Dissatisfied	1	2	3	Neutral	5	Very Satisfied 6 7
16.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease	1	2	3	No change	5	Large Increase 6 7

Comments:

Satisfaction with Practice Autonomy								
		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
17.	Satisfaction with my ability to initiate changes in the way work is done in the clinic	Very Dissatisfied	1	2	3	Neutral	5	Very Satisfied 6 7
18.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease	1	2	3	No change	5	Large Increase 6 7
19.	Satisfaction with my ability to make changes in my work schedule if needed	Very Dissatisfied	1	2	3	Neutral	5	Very Satisfied 6 7
20.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease	1	2	3	No change	5	Large Increase 6 7

Comments:

Satisfaction with my Organization	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
21. Satisfaction with the emphasis that local leadership places on primary care	Large Decrease	No change	Large Increase				
22. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
23. Satisfaction with local medical leadership	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
24. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change	Large Increase				
	1	2	3	4	5	6	7
25. Satisfaction with Air Force medical leadership	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
26. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change	Large Increase				
	1	2	3	4	5	6	7

Comments:

Satisfaction with my Professional Experience	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
27. Satisfaction with the training that I receive to perform my duties	Large Decrease	No change	Large Increase				
	1	2	3	4	5	6	7
28. Change in satisfaction in area listed above following implementation of PCO	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
29. Satisfaction with the breadth and depth of my administrative duties	Large Decrease	No change	Large Increase				
	1	2	3	4	5	6	7
30. Change in satisfaction in area listed above following implementation of PCO	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7

Comments:

Satisfaction with my Patient Relationships	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
31. Satisfaction that the patients appreciate the work I do for them	Large Decrease	No change	Large Increase				
	1	2	3	4	5	6	7
32. Change in satisfaction in area listed above following implementation of PCO	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
33. Satisfaction with the contribution I make to the lives of the patients	Large Decrease	No change	Large Increase				
	1	2	3	4	5	6	7
34. Change in satisfaction in area listed above following implementation of PCO	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7

Comments:

Satisfaction with Treatment Team Efficiency								
		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
35.	Satisfaction that the patients do not waste time accessing and receiving medical care							
36.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
37.	Satisfaction with overall treatment team efficiency	Very Dissatisfied		Neutral		Very Satisfied		
38.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		

Comments:

Satisfaction with the Quality of Medical Care								
		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
39.	Satisfaction with access to data reflecting the demographics and health status of the enrolled population							
40.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
41.	Satisfaction with the continuity of care that the patients receive	Very Dissatisfied		Neutral		Very Satisfied		
42.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
43.	Satisfaction with the overall quality of medical care that is provided	Very Dissatisfied		Neutral		Very Satisfied		
44.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		

Comments:

Satisfaction with my Pay and Opportunities for Advancement		Very Dissatisfied	Neutral	Very Satisfied				
		1	2	3	4	5	6	7
45.	Satisfaction with my pay and other benefits	Large Decrease	No change	Large Increase				
46.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
47.	Satisfaction with my prospects for promotion	Very Dissatisfied	Neutral	Very Satisfied				
48.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change	Large Increase				
49.	Satisfaction with my opportunities for recognition and awards	Very Dissatisfied	Neutral	Very Satisfied				
50.	Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change	Large Increase				

Comments:

Overall Satisfaction		Very Dissatisfied	Neutral	Very Satisfied				
		1	2	3	4	5	6	7
51.	Overall satisfaction with my current position in military medicine	Large Decrease	No change	Large Increase				
52.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7

Comments:

53.	With your current knowledge, if you were not in a clinic that is involved in optimization and had the option to accept a position, what would you decide?	Definitely Wouldn't Accept Position	Neutral or Uncertain	Definitely Would Accept Position
54.	If an administrator friend of yours told you they were interested in a position in an optimized clinic, what would you tell them?	Definitely Wouldn't Recommend Position	Neutral or Uncertain	Definitely Would Recommend Position
55.	Do you plan to separate from the Air Force (or quit your position) at your next opportunity?	Definitely	Neutral	Definitely Not
56.	Are you currently more or less likely to leave the Air Force at the next opportunity because of primary care optimization?	Much Less Likely to Separate	Neutral or Uncertain	Much More Likely to Separate

Comments:

## Health Care Integrator (HCI) PCO Satisfaction Questionnaire

**Demographics:** To be completed by all HCIs assigned to PCO teams. All responses will be grouped and compared in their aggregate to assure anonymity. (Please check the best answer or fill in the blank)

1. How much of your time is spent in direct support of the optimized primary care clinic? \_\_\_\_\_ %
2. What is your age? \_\_\_\_\_ years
3. What is your gender?  Male  Female
4. What is your current rank/grade? GS \_\_\_\_\_  
O \_\_\_\_\_ E \_\_\_\_\_  
Contractor
5. How many years have you worked in federal health care? \_\_\_\_\_ years
6. How many years have you worked in health care (government and civilian)? \_\_\_\_\_ years
7. How long have you worked in a clinic with optimized teams? \_\_\_\_\_ months
8. Did you work in a nonoptimized Air Force primary care clinic prior to working in your current optimized clinic?  
 yes  no  
- note: If your answer was "no" do not fill in the "before PCO" portions of the rest of the survey, nor the "change in satisfaction" portion of the satisfaction survey.
9. How many hours did you work before PCO and how many hours do you currently work on average per week? (Include call time spent in the office or hospital)

Before PCO	After PCO
_____ hours	_____ hours

10. What percentage of your time is spent in the following activities? Please estimate time usage both before and after the implementation of PCO (Total = 100%).

	Before PCO	After PCO
Patient Care	_____ %	_____ %
Patient Education	_____ %	_____ %
Staff Training	_____ %	_____ %
Resident Training	_____ %	_____ %
Administration	_____ %	_____ %
Military/Readiness	_____ %	_____ %
Research	_____ %	_____ %
Other _____	_____ %	_____ %

11. What is the name of the clinic where you work? \_\_\_\_\_

An optimized primary care team should have two medical technicians, one administrative technician, and one-half to one nurse per provider. Do you currently have these manpower resources in your clinic?

12. Two medical techs per provider?  yes  no

13. One administrative technician per provider?  yes  no

14. One-half nurse per provider?  yes  no

15. Did your clinic receive any additional manning following the implementation of PCO?

yes  no

16. How many exam rooms do you have for each provider? \_\_\_\_\_

17. How many treatment/procedure rooms do you have for each provider? \_\_\_\_\_

18. Did the number of treatment and exam rooms per provider increase with the implementation of PCO?

yes  no

19. What is your background in medicine?  nursing  other \_\_\_\_\_

**HCI Job Satisfaction** —To be completed by all health care integrators on the PCO teams. *For all statements below please circle the number that corresponds with your current satisfaction and your change in satisfaction following the implementation of the new primary care optimization program. All responses will be grouped and compared in their aggregate to assure anonymity.*

Satisfaction with Work Load								
1. Satisfaction with my level of leisure time and family time	Very Dissatisfied	Neutral		Very Satisfied				
	1	2	3	4	5	6	7	
2. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change		Large Increase				
3. Satisfaction with the pace of my work (amount of work to accomplish during the day)	Very Dissatisfied	Neutral		Very Satisfied				
4. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change		Large Increase				
	1	2	3	4	5	6	7	

Comments:

Satisfaction with Treatment Team								
5. Satisfaction with teamwork and interaction with treatment team members	Very Dissatisfied	Neutral		Very Satisfied				
	1	2	3	4	5	6	7	
6. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change		Large Increase				
7. Satisfaction with the way that the treatment team works together to support each other	Very Dissatisfied	Neutral		Very Satisfied				
8. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change		Large Increase				
	1	2	3	4	5	6	7	

Comments:

<b>Satisfaction with Facility/Equipment/Supplies</b>						
9. Satisfaction with number of exam and treatment rooms	Very Dissatisfied			Neutral		Very Satisfied
	1	2	3	4	5	6
10. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase
	1	2	3	4	5	6
11. Satisfaction with layout of the clinic to maximize efficiency	Very Dissatisfied			Neutral		Very Satisfied
	1	2	3	4	5	6
12. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase
	1	2	3	4	5	6
13. Satisfaction with equipment and ability to procure new equipment	Very Dissatisfied			Neutral		Very Satisfied
	1	2	3	4	5	6
14. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase
	1	2	3	4	5	6
15. Satisfaction with availability of supplies	Very Dissatisfied			Neutral		Very Satisfied
	1	2	3	4	5	6
16. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase
	1	2	3	4	5	6

Comments:

<b>Satisfaction with Practice Autonomy</b>						
17. Satisfaction with my ability to initiate changes in the way work is done in the clinic	Very Dissatisfied			Neutral		Very Satisfied
	1	2	3	4	5	6
18. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase
	1	2	3	4	5	6
19. Satisfaction with my ability to make changes in my work schedule if needed	Very Dissatisfied			Neutral		Very Satisfied
	1	2	3	4	5	6
20. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase
	1	2	3	4	5	6

Comments:

<b>Satisfaction with my Organization</b>								
21. Satisfaction with the emphasis that local leadership places on primary care		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
22. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7
23. Satisfaction with local medical leadership		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
24. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7
25. Satisfaction with Air Force medical leadership		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
26. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7

Comments:

<b>Satisfaction with my Professional Experience</b>								
27. Satisfaction with the training that I receive to perform my duties		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
28. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7
29. Satisfaction with the breadth and depth of my administrative duties		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
30. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7

Comments:

<b>Satisfaction with my Patient Relationships</b>								
31. Satisfaction that the patients appreciate the work I do for them		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
32. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7
33. Satisfaction with the contribution I make to the lives of the patients		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
34. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7

Comments:

Satisfaction with Treatment Team Efficiency	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
35. Satisfaction that the patients do not waste time accessing and receiving medical care	Large Decrease	No change	Large Increase				
36. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
37. Satisfaction with overall treatment team efficiency	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
38. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change	Large Increase				
	1	2	3	4	5	6	7

Comments:

Satisfaction with the Quality of Medical Care	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
39. Satisfaction with access to data reflecting the demographics and health status of the enrolled population	Large Decrease	No change	Large Increase				
40. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
41. Satisfaction with the continuity of care that the patients receive	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
42. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change	Large Increase				
	1	2	3	4	5	6	7
43. Satisfaction with the overall quality of medical care that is provided	Very Dissatisfied	Neutral	Very Satisfied				
	1	2	3	4	5	6	7
44. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change	Large Increase				
	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with my Pay and Opportunities for Advancement</b>								
45. Satisfaction with my pay and other benefits		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
46. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7
47. Satisfaction with my prospects for promotion		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
48. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7
49. Satisfaction with my opportunities for recognition and awards		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
50. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7

**Comments:**

<b>Overall Satisfaction</b>								
51. Overall satisfaction with my current position in military medicine		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
52. Change in satisfaction in area listed above following implementation of PCO		Large Decrease		No change		Large Increase		
		1	2	3	4	5	6	7

**Comments:**

53. With your current knowledge, if you were not in a clinic that is involved in optimization and had the option to accept a position, what would you decide?	Definitely Wouldn't Accept Position	Neutral or Uncertain	Definitely Would Accept Position
54. If a friend of yours told you they were interested in a position in an optimized clinic, what would you tell them?	Definitely Wouldn't Recommend Position	Neutral or Uncertain	Definitely Would Recommend Position
55. Do you plan to separate from the Air Force (or quit your position) at your next opportunity?	Definitely	Neutral	Definitely Not
56. Are you currently more or less likely to leave the Air Force at the next opportunity because of primary care optimization?	Much Less Likely to Separate	Neutral or Uncertain	Much More Likely to Separate

**Comments:**

## Medical Technician PCO Satisfaction Questionnaire

**Demographics:** To be completed by all medical technicians assigned to PCO teams. All responses will be grouped and compared in their aggregate to assure anonymity. (Please check the best answer or fill in the blank)

1. How much of your time is spent in direct support of the optimized primary care clinic? \_\_\_\_\_ %
2. What is your age? \_\_\_\_\_ years
3. What is your gender?  Male  Female
4. What is your current rank/grade? GS \_\_\_\_\_  
O \_\_\_\_\_  E \_\_\_\_\_  
 Contractor
5. How many years have you worked in federal health care? \_\_\_\_\_ years
6. How many years have you worked in health care (government and civilian)? \_\_\_\_\_ years
7. How long have you worked in a clinic with optimized teams? \_\_\_\_\_ months
8. Did you work in a nonoptimized Air Force primary care clinic prior to working in your current optimized clinic?  
 yes  no

- note: If your answer was "no" do not fill in the "before PCO" portions of the rest of the survey, nor the "change in satisfaction" portion of the satisfaction survey.

9. How many hours did you work before PCO and how many hours do you currently work on average per week? (Include call time spent in the office or hospital)

Before PCO	After PCO
_____ hours	_____ hours

10. What percentage of your time is spent in the following activities? Please estimate time usage both before and after the implementation of PCO (Total = 100%).

	Before PCO	After PCO
Patient Care	_____ %	_____ %
Patient Education	_____ %	_____ %
Staff Training	_____ %	_____ %
Resident Training	_____ %	_____ %
Administration	_____ %	_____ %
Military/Readiness	_____ %	_____ %
Research	_____ %	_____ %
Other _____	_____ %	_____ %

11. What is the name of the clinic where you work? \_\_\_\_\_

An optimized primary care team should have two medical technicians, one administrative technician, and one-half to one nurse per provider. Do you currently have these manpower resources in your clinic?

12. Two medical techs per provider?       **yes**       **no**

13. One administrative technician per provider?       **yes**       **no**

14. One-half nurse per provider?       **yes**       **no**

15. Did your clinic receive any additional manning following the implementation of PCO?

**yes**       **no**

16. How many exam rooms do you have for each provider? \_\_\_\_\_

17. How many treatment/procedure rooms do you have for each provider? \_\_\_\_\_

18. Did the number of treatment and exam rooms per provider increase with the implementation of PCO?

**yes**       **no**

**Medical Technician Job Satisfaction** —*To be filled out by all of the medical technicians assigned to PCO teams. For all statements below please circle the number that corresponds with your current satisfaction and your change in satisfaction following the implementation of the new primary care optimization program. All responses will be grouped and compared in their aggregate to assure anonymity.*

Satisfaction with Work Load								
1. Satisfaction with my level of leisure time and family time		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
2. Change in satisfaction in area listed above following implementation of PCO		Large Decrease			No change		Large Increase	
		1	2	3	4	5	6	7
3. Satisfaction with the pace of my work (amount of work to accomplish during the day)		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
4. Change in satisfaction in area listed above following implementation of PCO		Large Decrease			No change		Large Increase	
		1	2	3	4	5	6	7

Comments:

Satisfaction with Treatment Team								
5. Satisfaction with teamwork and interaction with treatment team members		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
6. Change in satisfaction in area listed above following implementation of PCO		Large Decrease			No change		Large Increase	
		1	2	3	4	5	6	7
7. Satisfaction with the way that the treatment team works together to support each other		Very Dissatisfied			Neutral		Very Satisfied	
		1	2	3	4	5	6	7
8. Change in satisfaction in area listed above following implementation of PCO		Large Decrease			No change		Large Increase	
		1	2	3	4	5	6	7

Comments:

<b>Satisfaction with Facility/Equipment/Supplies</b>								
		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
9.	Satisfaction with number of exam and treatment rooms	Large Decrease	No change	Large Increase				
10.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
11.	Satisfaction with layout of the clinic to maximize efficiency	Very Dissatisfied	Neutral	Very Satisfied				
12.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
13.	Satisfaction with equipment and ability to procure new equipment	Very Dissatisfied	Neutral	Very Satisfied				
14.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
15.	Satisfaction with availability of supplies	Very Dissatisfied	Neutral	Very Satisfied				
16.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7

**Comments:**

<b>Satisfaction with Practice Autonomy</b>								
		Very Dissatisfied		Neutral		Very Satisfied		
		1	2	3	4	5	6	7
17.	Satisfaction with my ability to initiate changes in the way work is done in the clinic	Large Decrease	No change	Large Increase				
18.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
19.	Satisfaction with my ability to make changes in my work schedule if needed	Very Dissatisfied	Neutral	Very Satisfied				
20.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7

**Comments:**

<b>Satisfaction with my Organization</b>							
21. Satisfaction with the emphasis that local leadership places on primary care	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
22. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
23. Satisfaction with local medical leadership	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
24. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
25. Satisfaction with Air Force medical leadership	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
26. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with my Professional Experience</b>							
27. Satisfaction with the training that I receive to perform my duties	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
28. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
29. Satisfaction with the breadth and depth of my duties	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
30. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with my Patient Relationships</b>							
31. Satisfaction that the patients appreciate the work I do for them	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
32. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7
33. Satisfaction with the contribution I make to the lives of the patients	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
34. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase		
	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with Treatment Team Efficiency</b>							
35. Satisfaction that the patients do not waste time accessing and receiving medical care	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
36. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7
37. Satisfaction with overall treatment team efficiency	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
38. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with the Quality of Medical Care</b>							
39. Satisfaction with access to data reflecting the demographics and health status of the enrolled population	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
40. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7
41. Satisfaction with the continuity of care that the patients receive	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
42. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7
43. Satisfaction with the overall quality of medical care that is provided	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
44. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase	
	1	2	3	4	5	6	7

Comments:

Satisfaction with my Pay and Opportunities for Advancement		Very Dissatisfied	Neutral	Very Satisfied				
		1	2	3	4	5	6	7
45.	Satisfaction with my pay and other benefits	Large Decrease	No change	Large Increase				
46.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
47.	Satisfaction with my prospects for promotion	Very Dissatisfied	Neutral	Very Satisfied				
48.	Change in Satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
49.	Satisfaction with my opportunities for recognition and awards	Very Dissatisfied	Neutral	Very Satisfied				
50.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7

Comments:

Overall Satisfaction		Very Dissatisfied	Neutral	Very Satisfied				
		1	2	3	4	5	6	7
51.	Overall satisfaction with my current position in military medicine	Large Decrease	No change	Large Increase				
52.	Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7

Comments:

53.	With your current knowledge, if you were not in a clinic that is involved in optimization and had the option to accept a position, what would you decide?	Definitely Wouldn't Accept Position	Neutral or Uncertain	Definitely Would Accept Position				
54.	If a friend of yours told you they were interested in a position in an optimized clinic, what would you tell them?	Definitely Wouldn't Recommend Position	Neutral or Uncertain	Definitely Would Recommend Position				
55.	Do you plan to separate from the Air Force (or quit your position) at your next opportunity?	Definitely	Neutral	Definitely Not				
56.	Are you currently more or less likely to leave the Air Force at the next opportunity because of primary care optimization?	Much Less Likely to Separate	Neutral or Uncertain	Much More Likely to Separate				

Comments:

## Health Service Manager PCO Satisfaction Questionnaire

**Demographics:** To be completed by all health service managers (administrative technicians) assigned to PCO teams. All responses will be grouped and compared in their aggregate to assure anonymity.  
(Please check the best answer or fill in the blank)

1. How much of your time is spent in direct support of the optimized primary care clinic? \_\_\_\_\_ %
2. What is your age? \_\_\_\_\_ years
3. What is your gender?  Male  Female
4. What is your current rank/grade? GS \_\_\_\_\_  
O \_\_\_\_\_ E \_\_\_\_\_  
Contractor
5. How many years have you worked in federal health care? \_\_\_\_\_ years
6. How many years have you worked in health care (government and civilian)? \_\_\_\_\_ years
7. How long have you worked in a clinic with optimized teams? \_\_\_\_\_ months
8. Did you work in a nonoptimized Air Force primary care clinic prior to working in your current optimized clinic?  
 yes  no

- note: If your answer was "no" do not fill in the "before PCO" portions of the rest of the survey, nor the "change in satisfaction" portion of the satisfaction survey.

9. How many hours did you work before PCO and how many hours do you currently work on average per week? (Include call time spent in the office or hospital)

<u>Before PCO</u>	<u>After PCO</u>
_____ hours	_____ hours

10. What percentage of your time is spent in the following activities? Please estimate time usage both before and after the implementation of PCO (Total = 100%).

	<u>Before PCO</u>	<u>After PCO</u>
Patient Care	_____ %	_____ %
Patient Education	_____ %	_____ %
Staff Training	_____ %	_____ %
Resident Training	_____ %	_____ %
Administration	_____ %	_____ %
Military/Readiness	_____ %	_____ %
Research	_____ %	_____ %
Other	_____ %	_____ %

11. What is the name of the clinic where you work? \_\_\_\_\_

An optimized primary care team should have two medical technicians, one administrative technician, and one-half to one nurse per provider. Do you currently have these manpower resources in your clinic?

12. Two medical techs per provider?       **yes**       **no**

13. One administrative technician per provider?       **yes**       **no**

14. One-half nurse per provider?       **yes**       **no**

15. Did your clinic receive any additional manning following the implementation of PCO?

**yes**       **no**

16. How many exam rooms do you have for each provider? \_\_\_\_\_

17. How many treatment/procedure rooms do you have for each provider? \_\_\_\_\_

18. Did the number of treatment and exam rooms per provider increase with the implementation of PCO?

**yes**       **no**

**Health Service Manager Job Satisfaction** —To be completed by all health service managers (administrative techs) assigned to PCO teams. *For all statements below please circle the number that corresponds with your current satisfaction and your change in satisfaction following the implementation of the new primary care optimization program. All responses will be grouped and compared in their aggregate to assure anonymity.*

Satisfaction with Work Load								
1. Satisfaction with my level of leisure time and family time	Very Dissatisfied			Neutral		Very Satisfied		
	1	2	3	4	5	6	7	
2. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase		
3. Satisfaction with the pace of my work (amount of work to accomplish during the day)	Very Dissatisfied			Neutral		Very Satisfied		
4. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase		
	1	2	3	4	5	6	7	

Comments:

Satisfaction with Treatment Team								
5. Satisfaction with teamwork and interaction with treatment team members	Very Dissatisfied			Neutral		Very Satisfied		
	1	2	3	4	5	6	7	
6. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase		
7. Satisfaction with the way that the treatment team works together to support each other	Very Dissatisfied			Neutral		Very Satisfied		
8. Change in satisfaction in area listed above following implementation of PCO	Large Decrease			No change		Large Increase		
	1	2	3	4	5	6	7	

Comments:

<b>Satisfaction with Facility/Equipment/Supplies</b>						
9. Satisfaction with number of exam and treatment rooms	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
10. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6
11. Satisfaction with layout of the clinic to maximize efficiency	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
12. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6
13. Satisfaction with equipment and ability to procure new equipment	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
14. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6
15. Satisfaction with availability of supplies	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
16. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6

**Comments:**

<b>Satisfaction with Practice Autonomy</b>						
17. Satisfaction with my ability to initiate changes in the way work is done in the clinic	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
18. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6
19. Satisfaction with my ability to make changes in my work schedule if needed	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
20. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6

**Comments:**

<b>Satisfaction with my Organization</b>							
	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
21. Satisfaction with the emphasis that local leadership places on primary care	Large Decrease	No change	Large Increase				
22. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
23. Satisfaction with local medical leadership	Very Dissatisfied	Neutral	Very Satisfied				
24. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
25. Satisfaction with Air Force medical leadership	Very Dissatisfied	Neutral	Very Satisfied				
26. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with my Professional Experience</b>							
	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
27. Satisfaction with the training that I receive to perform my duties	Large Decrease	No change	Large Increase				
28. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
29. Satisfaction with the breadth and depth of my administrative duties	Very Dissatisfied	Neutral	Very Satisfied				
30. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with my Patient Relationships</b>							
	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
31. Satisfaction that the patients appreciate the work I do for them	Large Decrease	No change	Large Increase				
32. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7
33. Satisfaction with the contribution I make to the lives of the patients	Very Dissatisfied	Neutral	Very Satisfied				
34. Change in satisfaction in area listed above following implementation of PCO	1	2	3	4	5	6	7

Comments:

<b>Satisfaction with Treatment Team Efficiency</b>						
35. Satisfaction that the patients do not waste time accessing and receiving medical care	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
36. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6
37. Satisfaction with overall treatment team efficiency	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
38. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6

**Comments:**

<b>Satisfaction with the Quality of Medical Care</b>						
39. Satisfaction with access to data reflecting the demographics and health status of the enrolled population	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
40. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6
41. Satisfaction with the continuity of care that the patients receive	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
42. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6
43. Satisfaction with the overall quality of medical care that is provided	Very Dissatisfied		Neutral		Very Satisfied	
	1	2	3	4	5	6
44. Change in satisfaction in area listed above following implementation of PCO	Large Decrease		No change		Large Increase	
	1	2	3	4	5	6

**Comments:**

Satisfaction with my Pay and Opportunities for Advancement							
45. Satisfaction with my pay and other benefits	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
46. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change		Large Increase			
	1	2	3	4	5	6	7
47. Satisfaction with my prospects for promotion	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
48. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change		Large Increase			
	1	2	3	4	5	6	7
49. Satisfaction with my opportunities for recognition and awards	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
50. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change		Large Increase			
	1	2	3	4	5	6	7

Comments:

Overall Satisfaction							
51. Overall satisfaction with my current position in military medicine	Very Dissatisfied		Neutral		Very Satisfied		
	1	2	3	4	5	6	7
52. Change in satisfaction in area listed above following implementation of PCO	Large Decrease	No change		Large Increase			
	1	2	3	4	5	6	7

Comments:

53. With your current knowledge, if you were not in a clinic that is involved in optimization and had the option to accept a position, what would you decide?	Definitely Wouldn't Accept Position	Neutral or Uncertain	Definitely Would Accept Position
	1 2 3	4 5	6 7
54. If a friend of yours told you they were interested in a position in an optimized clinic, what would you tell them?	Definitely Wouldn't Recommend Position	Neutral or Uncertain	Definitely Would Recommend Position
	1 2 3	4 5	6 7
55. Do you plan to separate from the Air Force (or quit your position) at your next opportunity?	Definitely	Neutral	Definitely Not
	1 2 3	4 5	6 7
56. Are you currently more or less likely to leave the Air Force at the next opportunity because of primary care optimization?	Much Less Likely to Separate	Neutral or Uncertain	Much More Likely to Separate
	1 2 3	4 5	6 7

Comments:

**Appendix B**

**Primary Care Optimization – Extent of Change Survey**

## Primary Care Optimization – Extent of Change

*To be completed by the medical treatment facility administrator or his/her representative. Please copy this survey and fill out a separate survey for each optimized clinic in the MTF. It is essential that you fill in all the blanks in the survey below. All satisfaction surveys from your entire facility will be tied to this survey. Failing to fill in the survey with accurate information will invalidate all of the other surveys. This survey attempts to describe the changes in operations that have occurred in your primary care clinics when they were changed to increase efficiencies. "Before" refers to conditions prior to the implementation of primary care optimization, for this survey please use Oct – Dec 1999 as the before date. "Current" refers to the conditions at this time. "Planned" refers to the conditions that the MTF plans to move toward. For all planned conditions that are significantly different than the current condition indicate the date when you anticipate you will reach the planned state.*

Name of Medical Treatment Facility \_\_\_\_\_

TRICARE Region \_\_\_\_\_ MAJCOM \_\_\_\_\_

Type of facility:

- 1** Clinic < 5 providers       **2** Clinic 5-10 providers       **3** Clinic >10 providers  
 **4** Hospital < 50 beds       **5** Hospital 50-100 beds       **6** Hospital > 100 beds  
 **7** Other

Name of Clinic \_\_\_\_\_ Date Clinic Optimized \_\_\_\_\_

Indicators	Before (Oct – Dec '99)	Current (Oct – Dec '00)	Planned	Date
1. Number of optimized teams <sup>1</sup>				
2. Total number of full-time primary care providers assigned to the MTF (GMOs, FPs, Peds, IM, FS)				
3. Total number of full-time primary care providers in optimized teams				
4. Total number of nurses in direct support <sup>2</sup> of optimized teams				
5. Total number of medical technicians in direct support <sup>2</sup> of optimized teams				
6. Total number of administrative technicians in direct support <sup>2</sup> of optimized teams				
7. Total number of administrative officers supporting optimized teams				
8. Total number of health care integrators supporting optimized teams				
9. Total number of examination rooms utilized by optimized teams				
10. Total number of treatment and procedure rooms utilized by optimized teams				
11. Do you utilize a nurse triage system to manage acute appointments with the optimized team?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12. Do you utilize nurse or technician managed clinics?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Indicators	Before (Oct - Dec '99)	Current (Oct - Dec '00)	Planned	Date
13. Does your support staff write the provider note?	<input type="checkbox"/> No <input type="checkbox"/> Some <input type="checkbox"/> All	<input type="checkbox"/> No <input type="checkbox"/> Some <input type="checkbox"/> All	<input type="checkbox"/> No <input type="checkbox"/> Some <input type="checkbox"/> All	
14. Does your support staff participate in the review, documentation, and delivery of clinical preventive services?	<input type="checkbox"/> No <input type="checkbox"/> Some <input type="checkbox"/> All	<input type="checkbox"/> No <input type="checkbox"/> Some <input type="checkbox"/> All	<input type="checkbox"/> No <input type="checkbox"/> Some <input type="checkbox"/> All	
15. Do providers dictate their notes for transcription?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16. Do providers receive assistance in coding patients (superbill, computerized coding, professional coders)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17. Total number of enrollees empanelled to optimized teams	(Oct - Dec '99)	(Oct - Dec '00)		
18. Average number of outpatient visits per day per optimized provider for the last 3 months	(Oct - Dec '99)	(Oct - Dec '00)		

1. An optimized team is defined as 2 providers and the support staff to optimize the efficiency of their clinical operations
2. Direct support is defined as more than 80% of their time working in the clinic.

**Appendix C**  
**SPSS Output – Staff Satisfaction Survey Reliability**

```
RELIABILITY  
/VARIABLES=leisure pace  
/FORMAT=LABELS  
/SCALE (ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .
```

## Workload Reliability

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

RELIABILITY ANALYSIS - SCALE (ALPHA)

1. LEISURE q1 Leisure Time Sat  
 2. PACE q3 Pace of Work Sat

	Mean	Std Dev	Cases			
1. LEISURE	4.2275	1.6235	1332.0			
2. PACE	3.7797	1.5507	1332.0			
N of Cases =			1332.0			
Item Means	Mean 4.0036	Minimum 3.7797	Maximum 4.2275	Range .4478	Max/Min 1.1185	Variance .1003

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
LEISURE	3.7797	2.4046	.6540	.3069	.
PACE	4.2275	2.6357	.6540	.3069	.

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	5210.591	1331	3.9148		
Within People	1631.6250	1332	1.2249		
Between Measures	133.5632	1	133.5632	418.6684	.0000
Residual	1498.0618	1331	1.1255		
Total	6842.2161	2663	2.5694		
Grand Mean	4.0036				

Reliability Coefficients 2 items

Alpha = .7125 Standardized item alpha = .7130

RELIABILITY

```
/VARIABLES=leisurex pacex
/FORMAT=LABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=TOTAL MEANS .
```

## Reliability

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

RELIABILITY ANALYSIS - SCALE (ALPHA)

1. LEISUREX q2 Leisure Time Change in Sat  
 2. PACEX q4 Pace of Work Change in Sat

		Mean	Std Dev	Cases
1.	LEISUREX	3.7154	1.3653	896.0
2.	PACEX	3.6758	1.5514	896.0
N of Cases =		896.0		
Item Means	Mean	Minimum	Maximum	Range Max/Min Variance
	3.6956	3.6758	3.7154	.0396 1.0108 .0008

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
LEISUREX	3.6758	2.4068	.6508	.4236	.
PACEX	3.7154	1.8642	.6508	.4236	.

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	3145.0702	895	3.5140		
Within People	678.1250	896	.7568		
Between Measures	.7033	1	.7033		
Residual	677.0217	895	.7569		
Total	3823.1952	1791	2.1347		
Grand Mean	3.6956				

Reliability Coefficients 2 items

Alpha = .7846 Standardized item alpha = .7885

RELIABILITY

```
/VARIABLES=leisurex leisure pacex pace
/FORMAT=LABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=TOTAL MEANS .
```

Workload Reliability

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

Reliability Coefficients

4 items

Alpha = .7733

Standardized item alpha = .7756

**RELIABILITY**

```
/VARIABLES=tsumpt nsupt record interpr teamwrk  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .
```

**Treatment Teamwork Reliability**

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

RELIABILITY ANALYSIS - SCALE (ALPHA)

1.	TSUPT	q5 Tech Support Sat
2.	NSUPT	q7 Nurse Support Sat
3.	RECORD	q9 Record Availability Sat
4.	INTERPR	q11 Team Interaction Sat
5.	TEAMWRK	q13 Teamwork Sat

		Mean	Std Dev	Cases
1.	TSUPT	4.0458	1.7233	284.0
2.	NSUPT	4.5599	1.6623	284.0
3.	RECORD	3.6197	1.6739	284.0
4.	INTERPR	4.8310	1.4066	284.0
5.	TEAMWRK	4.7535	1.3746	284.0

N of Cases = 284.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.3620	3.6197	4.8310	1.2113	1.3346	.2658

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
TSUPT	17.7641	21.5873	.6289	.3960	.7507
NSUPT	17.2500	23.0574	.5517	.3099	.7759
RECORD	18.1901	24.5786	.4367	.2068	.8125
INTERPR	16.9789	23.2222	.6954	.6859	.7348
TEAMWRK	17.0563	23.8413	.6628	.6685	.7454

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	1959.9465	283	6.9256		
Within People	1852.0000	1136	1.6303		
Between Measures	301.9958	4	75.4989	55.1384	.0000
Residual	1550.0042	1132	1.3693		
Total	3811.9465	1419	2.6864		
Grand Mean	4.3620				

R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

Reliability Coefficients      5 items

Alpha = .8023                  Standardized item alpha = .8105

**RELIABILITY**

```
/VARIABLES=tsuptx nsuptx recordx interprx teamwrkx  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .
```

**Reliability**

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

- |    |          |                                    |
|----|----------|------------------------------------|
| 1. | TSUPTX   | q6 Tech Support Change in Sat      |
| 2. | NSUPTX   | q8 Nurse Support Change in Sat     |
| 3. | RECORDX  | q10 Record Availability Sat Change |
| 4. | INTERPRX | q12 Team Interaction Sat Change    |
| 5. | TEAMWRKX | q14 Teamwork Sat Change            |

		Mean	Std Dev	Cases
1.	TSUPTX	4.5519	1.5540	241.0
2.	NSUPTX	4.7552	1.4209	241.0
3.	RECORDX	4.1701	1.5943	241.0
4.	INTERPRX	4.8506	1.3519	241.0
5.	TEAMWRKX	4.6971	1.3584	241.0

N of Cases = 241.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.6050	4.1701	4.8506	.6805	1.1632	.0708

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
TSUPTX	18.4730	20.2836	.6841	.4941	.7921
NSUPTX	18.2697	22.6978	.5582	.3470	.8264
RECORDX	18.8548	22.5497	.4744	.2340	.8540
INTERPRX	18.1743	20.7945	.7829	.7754	.7677
TEAMWRKX	18.3278	21.1463	.7430	.7466	.7783

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	1549.1701	240	6.4549		
Within People	1074.8000	964	1.1149		
Between Measures	68.2772	4	17.0693	16.2803	.0000
Residual	1006.5228	960	1.0485		
Total	2623.9701	1204	2.1794		
Grand Mean	4.6050				

R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

Reliability Coefficients      5 items

Alpha = .8376                  Standardized item alpha = .8433

~~RELIABILITY~~

~~/VARIABLES=tsumpx nsuptx interprx teamwrkx  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .~~

**Reliability**

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

R E L I A B I L I T Y    A N A L Y S I S    -    S C A L E    (A L P H A)

Reliability Coefficients

5 items

Alpha =

.7856

Standardized item alpha = .7916

**RELIABILITY**

```
/VARIABLES=tx_autn prt_atn schedle  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .
```

**Treatment Autonomy Reliability**

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1. TX\_AUTN q23 Treatment Autonomy Sat
2. PRT\_ATN q25 Practice Changes Sat
3. SCHEDLE q27 Schedule Changes Sat

		Mean	Std Dev	Cases
1.	TX_AUTN	5.0592	1.4460	287.0
2.	PRT_ATN	3.9686	1.6330	287.0
3.	SCHEDLE	3.9373	1.7689	287.0

N of Cases = 287.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.3217	3.9373	5.0592	1.1220	1.2850	.4082

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
TX_AUTN	7.9059	9.1904	.5572	.3187	.7387
PRT_ATN	8.9965	7.5839	.6577	.4327	.6235
SCHEDLE	9.0279	7.2789	.6033	.3761	.6927

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	1541.2172	286	5.3889		
Within People	948.6667	574	1.6527		
Between Measures	234.3020	2	117.1510	93.8041	.0000
Residual	714.3647	572	1.2489		
Total	2489.8839	860	2.8952		
Grand Mean	4.3217				

Reliability Coefficients 3 items

Alpha = .7682 Standardized item alpha = .7703

**RELIABILITY**  
**/VARIABLES=tx\_autnx prt\_atnx schedlex**  
**/FORMAT=LABELS**  
**/SCALE(ALPHA)=ALL/MODEL=ALPHA**  
**/STATISTICS=DESCRIPTIVE ANOVA**  
**/SUMMARY=TOTAL MEANS**.

**Change in Treatment Autonomy Reliability**

RELIABILITY ANALYSIS - SCALE (ALPHA)

1. TX\_AUTNX q24 Treatment Autonomy Sat Change
2. PRT\_ATNX q26 Practice Changes Sat Change
3. SCHEDLEX q28 Schedule Changes Sat Change

	Mean	Std Dev	Cases
1. TX_AUTNX	4.1157	1.1355	242.0
2. PRT_ATNX	4.1777	1.3160	242.0
3. SCHEDLEX	3.8306	1.4858	242.0

N of Cases = 242.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.0413	3.8306	4.1777	.3471	1.0906	.0343

Item-total Statistics

Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
TX_AUTNX 8.0083	6.2074	.5189	.2961	.7307
PRT_ATNX 7.9463	4.8394	.6669	.4450	.5547
SCHEDLEX 8.2934	4.6148	.5655	.3473	.6906

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	838.0937	241	3.4776		
Within People	438.6667	484	.9063		
Between Measures	16.5868	2	8.2934	9.4708	.0001
Residual	422.0799	482	.8757		
Total	1276.7603	725	1.7610		
Grand Mean	4.0413				

Reliability Coefficients 3 items

Alpha = .7482 Standardized item alpha = .7527

RELIABILITY  
/VARIABLES=consult pro\_int traing scope teaching  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .

## Professional Interaction Reliability

R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

1.	CONSULT	q35 Consultant Interaction Sat
2.	PRO_INT	q37 Professional Interaction Sat
3.	TRAING	q39 Training Sat
4.	SCOPE	q41 Scope of Practice Sat
5.	TEACHNG	q43 Teaching Sat

		Mean	Std Dev	Cases
1.	CONSULT	4.5159	1.4764	283.0
2.	PRO_INT	4.8233	1.5008	283.0
3.	TRAING	4.5583	1.5526	283.0
4.	SCOPE	4.0601	1.6395	283.0
5.	TEACHNG	3.8445	1.3776	283.0

N of Cases = 283.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.3604	3.8445	4.8233	.9788	1.2546	.1585

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
CONSULT	17.2862	21.1979	.4618	.2511	.7516
PRO_INT	16.9788	19.7017	.5781	.3592	.7123
TRAING	17.2438	19.7879	.5399	.2970	.7257
SCOPE	17.7420	19.3056	.5318	.3394	.7297
TEACHNG	17.9576	20.4025	.5911	.3779	.7105

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	1672.5837	282	5.9311		
Within People	1729.6000	1132	1.5279		
Between Measures	179.4134	4	44.8534	12.6377	.0000
Residual	1550.1866	1128	1.3743		
Total	3402.1837	1414	2.4061		
Grand Mean	4.3604				

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

Reliability Coefficients      5 items

Alpha = .7683      Standardized item alpha = .7701

**RELIABILITY**

```
/VARIABLES=consultx pro_intx traingx scopex teachngx  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .
```

**Changes in Professional Interaction Reliability**

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1.	CONSULTX	q36 Consultant Inter Sat Change
2.	PRO_INTX	q38 Pro Interaction Sat Change
3.	TRAININGX	q40 Training Sat Change
4.	SCOPEX	q42 Scope of Practice Sat Change
5.	TEACHNGX	q44 Teaching Sat Change

		Mean	Std Dev	Cases
1.	CONSULTX	4.1046	.8106	239.0
2.	PRO_INTX	3.9958	.9979	239.0
3.	TRAININGX	3.9916	.8981	239.0
4.	SCOPEX	3.6653	1.1726	239.0
5.	TEACHNGX	3.7741	.9954	239.0

N of Cases = 239.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	3.9063	3.6653	4.1046	.4393	1.1199	.0326

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
CONSULTX	15.4268	11.1532	.6151	.4064	.8351
PRO_INTX	15.5356	9.6447	.7261	.5327	.8039
TRAININGX	15.5397	10.3419	.6911	.4902	.8152
SCOPEX	15.8661	9.2341	.6359	.4241	.8351
TEACHNGX	15.7573	9.8736	.6836	.4689	.8155

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	720.7029	238	3.0282		
Within People	458.8000	956	.4799		
Between Measures	31.1180	4	7.7795	17.3168	.0000
Residual	427.6820	952	.4492		
Total	1179.5029	1194	.9879		
Grand Mean	3.9063				

R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

Reliability Coefficients      5 items

Alpha = .8516      Standardized item alpha = .8566

RELIABILITY  
/VARIABLES=pts\_apr contrib reltshp  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .

## Patient Appreciation Reliability

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1. PTS\_APPR q45 Patient Appreciation Sat
2. CONTRIB q47 Meaningful Contribution Sat
3. RELTSHP q49 Patient Relationship Sat

	Mean	Std Dev	Cases
1. PTS_APPR	5.0308	1.2826	292.0
2. CONTRIB	5.3425	1.1119	292.0
3. RELTSHP	5.3322	1.1257	292.0

N of Cases = 292.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	5.2352	5.0308	5.3425	.3116	1.0619	.0313

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
PTS_APPR	10.6747	4.4471	.7190	.5269	.8741
CONTRIB	10.3630	4.7750	.8171	.6782	.7802
RELTSHP	10.3733	4.9083	.7630	.6203	.8259

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	968.2237	291	3.3272		
Within People	257.3333	584	.4406		
Between Measures	18.3037	2	9.1518	22.2833	.0000
Residual	239.0297	582	.4107		
Total	1225.5571	875	1.4006		
Grand Mean	5.2352				

**Reliability Coefficients      3 items**

Alpha = .8766 Standardized item alpha = .8805

**RELIABILITY**

```
/VARIABLES=pts_aprx contribx reltshpx
/FORMAT=LABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=TOTAL MEANS .
```

## Change in Patient Relationship Reliability

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1. PTS\_APRX q46 Patient Appreciation Sat Change  
 2. CONTRIBX q48 Meaningful Contrib Sat Change  
 3. RELTSHPX q50 Patient Relationship Sat Change

	Mean	Std Dev	Cases
1. PTS_APRX	4.2823	1.0690	248.0
2. CONTRIBX	4.2339	1.0464	248.0
3. RELTSHPX	4.2823	1.1243	248.0

N of Cases = 248.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.2661	4.2339	4.2823	.0484	1.0114	.0008

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
PTS_APRX	8.5161	4.2912	.8060	.6544	.9005
CONTRIBX	8.5645	4.2144	.8599	.7410	.8578
RELTSHPX	8.5161	3.9997	.8316	.7035	.8811

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	741.3065	247	3.0012		
Within People	124.0000	496	.2500		
Between Measures	.3871	2	.1935		
Residual	123.6129	494	.2502		
Total	865.3065	743	1.1646		
Grand Mean	4.2661				

Reliability Coefficients 3 items

Alpha = .9166 Standardized item alpha = .9172

**RELIABILITY**

```
/VARIABLES=pts_aprx contribx reltshpx pts_apr contrib reltshp
/FORMAT=LABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=TOTAL MEANS .
```

**Reliability**

**RELIABILITY ANALYSIS - SCALE (ALPHA)**

1. QUAL\_PTX q64 Quality of Med Care Sat Change  
 2. CONT\_CRX q62 Continuity of Care Sat Change

	Mean	Std Dev	Cases			
1. QUAL_PTX	4.5921	1.2098	885.0			
2. CONT_CRX	4.6927	1.1960	885.0			
N of Cases =	885.0					
Item Means	Mean 4.6424	Minimum 4.5921	Maximum 4.6927	Range .1006	Max/Min 1.0219	Variance .0051

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
QUAL_PTX	4.6927	1.4303	.7100	.5041	.
CONT_CRX	4.5921	1.4635	.7100	.5041	.

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	2187.1220	884	2.4741		
Within People	3751.5000	885	.4243		
Between Measures	4.4751	1	4.4751		
Residual	371.0249	884	.4197		
Total	2562.6420	1769	1.4486		
Grand Mean	4.6424				

**Reliability Coefficients**

Alpha = .8304 Standardized item alpha = .8304

**RELIABILITY**

```
/VARIABLES=pay promote awards
/FORMAT=LABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=TOTAL MEANS .
```

**Compensation Reliability**

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1. PAY q65 Pay and Benefits Sat
2. PROMOTE q67 Promotion Opportunity Sat
3. AWARDS q69 Recognition Sat

		Mean	Std Dev	Cases
1.	PAY	4.1293	1.5771	1299.0
2.	PROMOTE	4.1913	1.4534	1299.0
3.	AWARDS	3.9038	1.5377	1299.0
N of Cases =		1299.0		

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.0748	3.9038	4.1913	.2875	1.0737	.0229

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
PAY	8.0951	7.2870	.5654	.3237	.7713
PROMOTE	8.0331	7.2138	.6741	.4639	.6549
AWARDS	8.3206	7.0514	.6334	.4272	.6955

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	6311.9455	1298	4.8628		
Within People	2786.5000	2598	1.0726		
Between Measures	59.4897	2	29.7449		
Residual	2727.0103	2596	1.0505		
Total	9098.4455	3896	2.3353		
Grand Mean	4.0748				

**Reliability Coefficients      3 items**

Alpha = .7840      Standardized item alpha = .7859

**RELIABILITY**  
/VARIABLES=payx promotex awardsx  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .

**Change in Pay and Benefits Reliability**

RELIABILITY ANALYSIS - SCALE (ALPHA)

1. PAYX q66 Pay and Benefits Sat Change  
 2. PROMOTEX q68 Promotion Opportunity Sat Change  
 3. AWARDSX q70 Recognition Sat Change

	Mean	Std Dev	Cases
1. PAYX	3.8886	.9886	871.0
2. PROMOTEX	3.9317	1.0200	871.0
3. AWARDSX	3.8439	1.1146	871.0
N of Cases =	871.0		

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	3.8881	3.8439	3.9317	.0878	1.0228	.0019

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
PAYX	7.7755	3.6567	.5416	.2978	.7515
PROMOTEX	7.7325	3.2376	.6548	.4332	.6289
AWARDSX	7.8203	3.0473	.6147	.3970	.6757

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	1937.6741	870	2.2272		
Within People	901.8333	1742	.5177		
Between Measures	3.3599	2	1.6800		
Residual	898.4734	1740	.5164		
Total	2839.5075	2612	1.0871		
Grand Mean	3.8881				

Reliability Coefficients 3 items

Alpha = .7682 Standardized item alpha = .7687

RELIABILITY  
 /VARIABLES=positn separte  
 /FORMAT=LABELS  
 /SCALE(ALPHA)=ALL/MODEL=ALPHA  
 /STATISTICS=DESCRIPTIVE ANOVA  
 /SUMMARY=TOTAL MEANS .

**Reliability**

```
RELIABILITY  
/VARIABLES=exm_rms layout equpmnt supply  
/FORMAT=LABELS  
/SCALE (ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .
```

## Facility Support: Reliability

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1.	EXM_RMS	q15 Exam Rooms Sat
2.	LAYOUT	q17 Clinic Layout Sat
3.	EQUPMNT	q19 Equipment Sat
4.	SUPPLY	q21 Supplies Sat

		Mean	Std Dev	Cases
1.	EXM_RMS	4.6520	1.5179	1299.0
2.	LAYOUT	3.9754	1.5267	1299.0
3.	EQUPMNT	3.9561	1.2830	1299.0
4.	SUPPLY	3.8968	1.3851	1299.0

N of Cases = 1299.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.1201	3.8968	4.6520	.7552	1.1938	.1269

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
EXM_RMS	11.8283	11.8819	.5182	.3010	.7558
LAYOUT	12.5050	11.3365	.5780	.3514	.7235
EQUPMNT	12.5242	12.0709	.6609	.5217	.6857
SUPPLY	12.5835	12.1276	.5766	.4713	.7232

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	6363.0624	1298	4.9022		
Within People	4774.0000	3897	1.2250		
Between Measures	494.4527	3	164.8176	149.9690	.0000
Residual	4279.5473	3894	1.0990		
Total	11137.0624	5195	2.1438		
Grand Mean	4.1201				

R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

Reliability Coefficients      4 items

Alpha = .7758                  Standardized item alpha = .7809

RELIABILITY  
/VARIABLES=exm\_rmsx layoutx equpmntx supplyx  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .

### **Change in Facility: Reliability**

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

**R E L I A B I L I T Y   A N A L Y S I S - S C A L E (A L P H A)**

1. EXM\_RMSX q16 Exam Rooms Sat Change
2. LAYOUTX q18 Clinic Layout Sat Change
3. EQUPMNTX q20 Equipment Sat Change
4. SUPPLYX q22 Supplies Sat Change

	Mean	Std Dev	Cases
1. EXM_RMSX	4.4687	1.1680	862.0
2. LAYOUTX	4.1125	1.2642	862.0
3. EQUPMNTX	4.0139	1.0109	862.0
4. SUPPLYX	3.9478	1.0205	862.0

N of Cases = 862.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.1357	3.9478	4.4687	.5209	1.1319	.0538

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
EXM_RMSX	12.0742	7.2860	.5106	.2781	.7462
LAYOUTX	12.4304	6.5079	.5835	.3463	.7100
EQUPMNTX	12.5290	7.4527	.6152	.4512	.6941
SUPPLYX	12.5951	7.5188	.5914	.4343	.7051

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	2554.9780	861	2.9675		
Within People	1911.5000	2586	.7392		
Between Measures	139.2552	3	46.4184	67.6536	.0000
Residual	1772.2448	2583	.6861		
Total	4466.4780	3447	1.2958		
Grand Mean	4.1357				

R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

Reliability Coefficients      4 items

Alpha = .7688                  Standardized item alpha = .7747

RELIABILITY  
/VARIABLES=pc\_emph lcl\_ldr af\_ldr  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .

**Organization: Reliability**

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

RELIABILITY ANALYSIS - SCALE (ALPHA)

1. PC\_EMPH q29 Prim Care Emphasis Sat  
 2. LCL\_LDR q31 Local Leadership Sat  
 3. AF\_LDR q33 AF Leadership Sat

	Mean	Std Dev	Cases
1. PC_EMPH	4.2956	1.4429	1299.0
2. LCL_LDR	4.3341	1.5129	1299.0
3. AF_LDR	4.0139	1.4497	1299.0
N of Cases =	1299.0		

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.2145	4.0139	4.3341	.3202	1.0798	.0306

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
PC_EMPH	8.3480	7.1254	.7164	.5577	.7677
LCL_LDR	8.3095	6.4789	.7736	.6132	.7086
AF_LDR	8.6297	7.5939	.6296	.4059	.8488

Analysis of Variance

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	6371.3246	1298	4.9086		
Within People	2109.3333	2598	.8119		
Between Measures	79.4231	2	39.7116	50.7861	.0000
Residual	2029.9102	2596	.7819		
Total	8480.6579	3896	2.1768		
Grand Mean	4.2145				

Reliability Coefficients 3 items

Alpha = .8407 Standardized item alpha = .8402

RELIABILITY

```
/VARIABLES=pc_emphx lcl_ldrx af_ldrx
/FORMAT=LABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=TOTAL MEANS .
```

**Change in Organization: Reliability**

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1. PC\_EMPHX q30 Prim Care Emphasis Sat Change
2. LCL\_LDRX q32 Local Leadership Sat Change
3. AF\_LDRX q34 AF Leadership Sat Change

	Mean	Std Dev	Cases
1. PC_EMPHX	4.1735	1.3245	859.0
2. LCL_LDRX	4.0629	1.2491	859.0
3. AF_LDRX	3.8300	1.2418	859.0

N of Cases = 859.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.0221	3.8300	4.1735	.3434	1.0897	.0307

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
PC_EMPHX	7.8929	4.9163	.6957	.5071	.7379
LCL_LDRX	8.0035	5.1037	.7252	.5353	.7082
AF_LDRX	8.2363	5.5933	.6165	.3828	.8149

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	3076.4059	858	3.5856		
Within People	1143.3333	1718	.6655		
Between Measures	52.7939	2	26.3970	41.5365	.0000
Residual	1090.5394	1716	.6355		
Total	4219.7392	2576	1.6381		
Grand Mean	4.0221				

**Reliability Coefficients      3 items**

Alpha = .8228      Standardized item alpha = .8229

**RELIABILITY**  
/VARIABLES=waste non\_pc tx\_eff  
/FORMAT=LABELS  
/SCALE(ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .

**Efficiency: Reliability**

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1. WASTE            q51 Patient Time Mgmt Sat  
 2. NON\_PC          q53 Time Outside Pt Care Sat  
 3. TX\_EFF          q55 Treatment Team Efficiency Sat

	Mean	Std Dev	Cases
1. WASTE	3.7266	1.4281	289.0
2. NON_PC	3.2042	1.3552	289.0
3. TX_EFF	4.1211	1.3779	289.0

N of Cases = 289.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	3.6840	3.2042	4.1211	.9170	1.2862	.2116

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
WASTE	7.3253	5.3036	.5455	.2989	.5915
NON_PC	7.8478	5.8309	.4987	.2488	.6492
TX_EFF	6.9308	5.5716	.5321	.2855	.6086

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	1049.4072	288	3.6438		
Within People	736.0000	578	1.2734		
Between Measures	122.2860	2	61.1430	57.3857	.0000
Residual	613.7140	576	1.0655		
Total	1785.4072	866	2.0617		
Grand Mean	3.6840				

Reliability Coefficients      3 items

Alpha = .7076      Standardized item alpha = .7074

```
RELIABILITY
/VARIABLES=wastex non_pcx tx_effx
/FORMAT=LABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=TOTAL MEANS .
```

## **Change in Efficiency: Reliability**

**R E L I A B I L I T Y   A N A L Y S I S - S C A L E (A L P H A)**

1. WASTEX q52 Patient Time Mgmt Sat Change
2. NON\_PCX q54 Time Outside Pt Care Sat Change
3. TX\_EFFX q56 Tx Team Efficiency Sat Change

	Mean	Std Dev	Cases
1. WASTEX	4.1516	1.1818	244.0
2. NON_PCX	3.6230	1.2428	244.0
3. TX_EFFX	4.5000	1.2652	244.0

N of Cases = 244.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.0915	3.6230	4.5000	.8770	1.2421	.1950

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
WASTEX	8.1230	4.5198	.6084	.3737	.6082
NON_PCX	8.6516	4.6395	.5211	.2747	.7078
TX_EFFX	7.7746	4.3564	.5711	.3402	.6497

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	726.8675	243	2.9912		
Within People	472.0000	488	.9672		
Between Measures	95.1667	2	47.5833	61.3680	.0000
Residual	376.8333	486	.7754		
Total	1198.8675	731	1.6400		
Grand Mean	4.0915				

**Reliability Coefficients      3 items**

Alpha = .7408      Standardized item alpha = .7419

**RELIABILITY**

```
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/FORMAT=LABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=TOTAL MEANS .
```

**Quality of Care: Reliability**

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1.	POPHLTH	q57 Pop Health Data Sat
2.	TIME_PT	q59 Time with Patient Sat
3.	CONT_CR	q61 Continuity of Care Sat
4.	QUAL_PT	q63 Quality of Med Care Sat

	Mean	Std Dev	Cases
1.	POPHLTH	3.7743	1.2774
2.	TIME_PT	3.4201	1.4982
3.	CONT_CR	4.4063	1.4111
4.	QUAL_PT	5.0347	1.1976

N of Cases = 288.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.1589	3.4201	5.0347	1.6146	1.4721	.5073

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
POPHLTH	12.8611	10.8796	.3671	.1482	.7183
TIME_PT	13.2153	9.2009	.4577	.2360	.6755
CONT_CR	12.2292	8.7557	.5818	.4073	.5902
QUAL_PT	11.6007	9.6762	.6032	.4278	.5904

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	1119.6797	287	3.9013		
Within People	1414.2500	864	1.6369		
Between Measures	438.3151	3	146.1050	128.8984	.0000
Residual	975.9349	861	1.1335		
Total	2533.9297	1151	2.2015		
Grand Mean	4.1589				

R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

Reliability Coefficients      4 items

Alpha = .7095                  Standardized item alpha = .7139

RELIABILITY

```
/VARIABLES=pophlthx time_ptx cont_crq qual_ptx
/FORMAT=LABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=TOTAL MEANS .
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**Change in Quality of Care: Reliability**

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1. POPHLTHX q58 Pop Health Data Sat Change  
 2. TIME\_PTX q60 Time with Patient Sat Change  
 3. CONT\_CRX q62 Continuity of Care Sat Change  
 4. QUAL\_PTX q64 Quality of Med Care Sat Change

	Mean	Std Dev	Cases
1. POPHLTHX	4.2122	.8985	245.0
2. TIME_PTX	3.3061	1.2546	245.0
3. CONT_CRX	4.6082	1.1707	245.0
4. QUAL_PTX	4.3224	1.0968	245.0

N of Cases = 245.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.1122	3.3061	4.6082	1.3020	1.3938	.3167

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
POPHLTHX	12.2367	8.0667	.3737	.1425	.7288
TIME_PTX	13.1429	6.2705	.4674	.2456	.6913
CONT_CRX	11.8408	6.1672	.5579	.3858	.6283
QUAL_PTX	12.1265	6.0126	.6629	.4669	.5641

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	657.6531	244	2.6953		
Within People	784.0000	735	1.0667		
Between Measures	232.7388	3	77.5796	103.0152	.0000
Residual	551.2612	732	.7531		
Total	1441.6531	979	1.4726		
Grand Mean	4.1122				

R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)

Reliability Coefficients      4 items

Alpha = .7206                  Standardized item alpha = .7205

RELIABILITY

```
/VARIABLES=positn separte  
/FORMAT=LABELS  
/SCALE (ALPHA)=ALL/MODEL=ALPHA  
/STATISTICS=DESCRIPTIVE ANOVA  
/SUMMARY=TOTAL MEANS .
```

**Reliability**

*Overall Satisfaction*

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1. POSITN q71 Position in Military Sat  
 2. SEPARTE q75 Likelihood of Separation

	Mean	Std Dev	Cases
1. POSITN	4.1037	1.6027	1287.0
2. SEPARTE	4.0486	2.2079	1287.0

N of Cases = 1287.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.0761	4.0486	4.1037	.0552	1.0136	.0015

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
POSITN	4.0486	4.8750	.4582	.2099	.
SEPARTE	4.1037	2.5687	.4582	.2099	.

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	6871.3254	1286	5.3432		
Within People	2703.2500	1287	2.1004		
Between Measures	1.9584	1	1.9584	.9323	.3344
Residual	2701.2916	1286	2.1005		
Total	9574.5754	2573	3.7212		
Grand Mean	4.0761				

Reliability Coefficients 2 items

Alpha = .6069 Standardized item alpha = .6284

**RELIABILITY**

```
/VARIABLES=positnx separtx2 repeat friend
/FORMAT=LABELS
/SCALE(ALPHA)=ALL/MODEL=ALPHA
/STATISTICS=DESCRIPTIVE ANOVA
/SUMMARY=TOTAL MEANS .
```

**Change in Overall Satisfaction: Reliability**

\*\*\*\*\* Method 2 (covariance matrix) will be used for this analysis \*\*\*\*\*

**R E L I A B I L I T Y   A N A L Y S I S   -   S C A L E   (A L P H A)**

1. POSITNX q72 Position in Military Sat Change  
 2. SEPARTX2 Change in Likelihood of Separation, Modi  
 3. REPEAT q73 Likelihood that would do again  
 4. FRIEND q74 Likelihood to recommend to friend

	Mean	Std Dev	Cases
1. POSITNX	3.9308	1.3358	852.0
2. SEPARTX2	4.2383	1.7555	852.0
3. REPEAT	4.4032	1.6866	852.0
4. FRIEND	4.4143	1.6852	852.0

N of Cases = 852.0

Item Means	Mean	Minimum	Maximum	Range	Max/Min	Variance
	4.2466	3.9308	4.4143	.4836	1.1230	.0508

**Item-total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Squared Multiple Correlation	Alpha if Item Deleted
POSITNX	13.0558	19.7598	.6154	.4124	.8345
SEPARTX2	12.7482	16.3452	.6640	.4547	.8146
REPEAT	12.5833	16.8127	.6648	.5247	.8125
FRIEND	12.5722	15.3382	.8087	.6662	.7459

**Analysis of Variance**

Source of Variation	Sum of Sq.	DF	Mean Square	F	Prob.
Between People	6138.3987	851	7.2132		
Within People	2970.0625	2556	1.1620		
Between Measures	129.9075	3	43.3025	38.9244	.0000
Residual	2840.1550	2553	1.1125		
Total	9108.4612	3407	2.6735		
Grand Mean	4.2466				

R E L I A B I L I T Y    A N A L Y S I S    -    S C A L E    (A L P H A)

Reliability Coefficients    4 items

Alpha = .8458              Standardized item alpha = .8473

**Appendix D**

**MHS Patient Satisfaction Survey**



(Name of Facility Goes Here)  
(Name of Clinic Goes Here)

RCS DD-HA/MR2016  
Expires 25 February 2003

Please use the enclosed envelope and  
mail the completed survey to:  
Department of Defense  
c/o National Research Corporation  
1245 O ST.  
LINCOLN, NE 68508-4402  
1-800-733-9714

1. What was the main purpose of your visit on (date of appointment goes here) to the (name of clinic goes here)?
- Care for illness or injury where you felt you needed to see a doctor right away (urgent care)  
 Routine care for a non-urgent condition  
 Well patient visit for preventive care (check-up)  
 Specialty care, referral visit
2. Did (name of provider goes here) or another provider treat you?
- (Name of provider goes here)  
 Other Provider (please keep that person in mind as you complete this questionnaire)
3. Thinking about your visit on (date of appointment goes here), how would you rate (name of provider goes here) and the staff of the (name of clinic goes here) on:
- a. Friendliness and courtesy shown to you by the clinic's staff  
b. Attention given to what you had to say  
c. Thoroughness of treatment you received  
d. Explanations of medical procedures and tests  
e. Personal interest in you and your medical problems  
f. Advice you received about ways to avoid illness and stay healthy  
g. Amount of time you had with (name of provider goes here) and staff during your visit  
h. How much you were helped by the care you received  
i. How well the care met your needs  
j. Overall quality of the care and service you received
- |    | Poor                  | Fair                  | Good                  | Very Good             | Excellent             |
|----|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| a. | <input type="radio"/> |
| b. | <input type="radio"/> |
| c. | <input type="radio"/> |
| d. | <input type="radio"/> |
| e. | <input type="radio"/> |
| f. | <input type="radio"/> |
| g. | <input type="radio"/> |
| h. | <input type="radio"/> |
| i. | <input type="radio"/> |
| j. | <input type="radio"/> |
- Definitely Not  
Not  
Somewhat  
Somewhat Satisfied  
Satisfied  
Very Satisfied  
Definitely Yes
4. Would you recommend (name of provider goes here) to family or friends?
5. All things considered, how satisfied are you with the medical care you received at the (name of clinic goes here) during this visit?
- |    | Completely Dissatisfied | Very Dissatisfied     | Somewhat Dissatisfied | Dissatisfied          | Not Satisfied         | Satisfied             | Very Satisfied        | Completely Satisfied  |
|----|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 5. | <input type="radio"/>   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
6. How many days were there between the day your appointment was made and the day you saw (name of provider goes here)?
- Same day     4 - 7 days     More than 30 days  
 1 day     8 - 14 days     I did not have an appointment time; I "walked in" to the clinic (GO TO Q8)  
 2 - 3 days     15 - 30 days
7. How would you rate the number of days between the day your appointment was made and the day you saw (name of provider goes here)?
- |    | Poor                  | Fair                  | Good                  | Very Good             | Excellent             |
|----|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 7. | <input type="radio"/> |
8. How long did you wait for (name of provider goes here) past your appointment time (or past the time you walked in if you did not have a specific appointment)?
- Did not wait     16 - 30 minutes     46 - 60 minutes  
 1 - 15 minutes     31 - 45 minutes     More than 60 minutes



"001AMD821" 0065830

9. How would you rate the number of minutes you spent waiting for (name of provider goes here)?	Poor <input type="radio"/>	Fair <input type="radio"/>	Good <input type="radio"/>	Very Good <input type="radio"/>	Excellent <input type="radio"/>		
10. How would you rate the (name of clinic goes here) on:	Poor <input type="radio"/>	Fair <input type="radio"/>	Good <input type="radio"/>	Very Good <input type="radio"/>	Excellent <input type="radio"/>	Not Applicable <input type="radio"/>	
a. Ease of making this appointment by phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
b. Access to medical care whenever you need it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
c. The process of obtaining a referral for specialty care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
11. Thinking about times when you have called the (name of clinic goes here) for medical information or advice, how would you rate the length of time it took clinic personnel to return your call?	Poor <input type="radio"/>	Fair <input type="radio"/>	Good <input type="radio"/>	Very Good <input type="radio"/>	Excellent <input type="radio"/>	Not Applicable <input type="radio"/>	
12. All things considered, how satisfied were you with the (name of clinic goes here) during this visit?	Completely Dissatisfied <input type="radio"/>	Very Dissatisfied <input type="radio"/>	Somewhat Dissatisfied <input type="radio"/>	Neither Dissatisfied Nor Satisfied <input type="radio"/>	Somewhat Satisfied <input type="radio"/>	Very Satisfied <input type="radio"/>	Completely Satisfied <input type="radio"/>

Previously we asked you about your specific appointment with (Name of Provider goes here) and the (Name of Clinic goes here).

We would now like to ask you some more general questions.

13. How would you rate (name of hospital goes here) on the following:	Poor <input type="radio"/>	Fair <input type="radio"/>	Good <input type="radio"/>	Very Good <input type="radio"/>	Excellent <input type="radio"/>	haven't used <input type="radio"/>
a. Pharmacy services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. X-ray services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Laboratory services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Medical record services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Are you enrolled in TRICARE Prime?	<input type="radio"/> Yes	<input type="radio"/> No (GO TO Q16)	<input type="radio"/> Not eligible to enroll (GO TO Q16)	<input type="radio"/> Don't know (GO TO Q16)		Dont know <input type="radio"/>
15. Is (name of provider goes here) (or the provider you saw) your Primary Care Manager?	Yes <input type="radio"/>	No <input type="radio"/>				
16. If you were given the option, would you:	<input type="radio"/> Enroll in TRICARE Prime	<input type="radio"/> Disenroll from TRICARE Prime	<input type="radio"/> TRICARE Prime is not available in this area			
	<input type="radio"/> Re-enroll in TRICARE Prime	<input type="radio"/> Not enroll in TRICARE Prime				
17. In general, would you say your health is:	Excellent <input type="radio"/>	Very Good <input type="radio"/>	Good <input type="radio"/>	Fair <input type="radio"/>	Poor <input type="radio"/>	

If you would like to tell us about your last visit or your overall experience with the (Name of Clinic goes here) or (Name of Provider goes here), please write your comments on a separate sheet of paper and return it with this survey. The separate sheet will be forwarded directly to the Commander at (Name of Facility goes here).

Thank you for completing this survey. Please return it in the postage-paid envelope at your earliest possible convenience.



001AMDR021

0065R3D



**Appendix E**

**SPSS Output – Productivity Analysis**

FREQUENCIES

```
VARIABLES=prod_d_b prod_d_a prod_d_x prod_w_b prod_w_a prod_w_x maxprod
en_rat_b en_rat_a en_rat_x
/NTILES= 10
/STATISTICS=STDDEV RANGE MINIMUM MAXIMUM MEAN MEDIAN SKEWNESS SESKEW
/ORDER= ANALYSIS .
```

## Frequencies

Statistics

		Daily Productivity, 1999	Daily Productivity, 2000	Daily Productivity, Change
N	Valid	1324	1339	1324
	Missing	19	4	19
Mean		14.998	19.352	4.3245
Median		14.000	19.000	4.0000
Std. Deviation		4.290	3.819	3.5652
Skewness		1.216	.572	.210
Std. Error of Skewness		.067	.067	.067
Range		25.3	23.0	21.00
Minimum		6.8	12.0	-6.50
Maximum		32.1	35.0	14.50
Percentiles	10	11.000	15.000	.0000
	20	12.000	16.000	2.0000
	30	12.900	17.000	2.3000
	40	13.000	17.600	3.0000
	50	14.000	19.000	4.0000
	60	15.000	20.000	5.0000
	70	16.000	21.000	6.0000
	80	18.000	22.000	7.0000
	90	20.000	25.000	9.4000

Statistics

		Weekly Productivity, 1999	Weekly Productivity, 2000	Weekly Productivity, Change	Extra Possible Productivity
N	Valid	234	268	232	252
	Missing	1109	1075	1111	1091
Mean		92.951	112.110	19.6336	36.12
Median		95.000	115.000	20.0000	25.00
Std. Deviation		24.415	27.337	19.9183	37.22
Skewness		-.212	-.279	.904	2.913
Std. Error of Skewness		.159	.149	.160	.153
Range		158.0	197.0	146.00	300
Minimum		17.0	23.0	-36.00	0
Maximum		175.0	220.0	110.00	300
Percentiles	10	61.500	80.000	.0000	5.00
	20	75.000	100.000	.0000	10.00
	30	80.000	100.000	10.0000	15.00
	40	88.000	110.000	15.0000	20.00
	50	95.000	115.000	20.0000	25.00
	60	100.000	120.000	25.0000	30.00
	70	100.000	125.000	25.0000	45.50
	80	110.000	125.000	32.0000	50.00
	90	125.000	140.000	43.5000	100.00

### Statistics

		Enrollees/Provider, 1999	Enrollees/Provider, 2000	Enrollees/Provider, Change
N	Valid	1343	1343	1343
	Missing	0	0	0
Mean		978.81624	1301.87843	323.06219
Median		963.66667	1269.00000	255.33333
Std. Deviation		424.74208	365.08866	284.12730
Skewness		2.522	2.823	.749
Std. Error of Skewness		.067	.067	.067
Range		3987.500	3750.000	1245.667
Minimum		.000	250.000	-81.000
Maximum		3987.500	4000.000	1164.667
Percentiles	10	461.50000	924.00000	.00000
	20	709.62500	1068.00000	64.12500
	30	816.25000	1164.66667	150.00000
	40	929.00000	1227.50000	192.60000
	50	963.66667	1269.00000	255.33333
	60	1050.00000	1375.00000	347.50000
	70	1166.66667	1450.00000	449.00000
	80	1250.00000	1500.00000	596.28571
	90	1350.00000	1571.66667	707.00000

## **Appendix F**

### **SPSS Output – The Effect of Nursing Support on Overall Staff Satisfaction**

**UNIANOVA**  
**positn BY nurse**  
**/METHOD = SSTYPE(3)**  
**/INTERCEPT = INCLUDE**  
**/PLOT = PROFILE( nurse )**  
**/PRINT = DESCRIPTIVE**  
**/CRITERIA = ALPHA(.05)**  
**/DESIGN = nurse .**

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
1/2 Nurse per Provider?	0
1	974

### Descriptive Statistics

Dependent Variable: q71 Position in Military Sat

1/2 Nurse per Provider?	Mean	Std. Deviation	N
0	3.837	1.710	292
1	4.217	1.553	974
Total	4.129	1.598	1266

### Tests of Between-Subjects Effects

Dependent Variable: q71 Position in Military Sat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	32.321 <sup>a</sup>	1	32.321	12.775	.000
Intercept	14572.269	1	14572.269	5759.982	.000
NURSE	32.321	1	32.321	12.775	.000
Error	3197.814	1264	2.530		
Total	24815.250	1266			
Corrected Total	3230.134	1265			

a. R Squared = .010 (Adjusted R Squared = .009)

## Profile Plots

## **Appendix G**

### **SPSS Output – The Effect of Gender on the Change in Overall Staff Satisfaction**

UNIANOVA  
 satsftnx BY gender  
 /METHOD = SSTYPE(3)  
 /INTERCEPT = INCLUDE  
 /PRINT = DESCRIPTIVE  
 /CRITERIA = ALPHA(.05)  
 /DESIGN = gender .

## Gender, All Staff: Univariate Analysis of Variance

### Between-Subjects Factors

	N
gender 0	731
1	542

### Descriptive Statistics

Dependent Variable: Overall Change in Satisfaction

gender	Mean	Std. Deviation	N
0	4.43143	1.35232	731
1	4.17089	1.37543	542
Total	4.32050	1.36775	1273

### Tests of Between-Subjects Effects

Dependent Variable: Overall Change in Satisfaction

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	21.126 <sup>a</sup>	1	21.126	11.385	.001
Intercept	23031.376	1	23031.376	12411.864	.000
GENDER	21.126	1	21.126	11.385	.001
Error	2358.459	1271	1.856		
Total	26142.351	1273			
Corrected Total	2379.586	1272			

a. R Squared = .009 (Adjusted R Squared = .008)

## **Appendix H**

### **SPSS Output – The Effect of Type of Employee on Overall Provider Satisfaction**

UNIANOVA  
 positn BY wrkr\_typ  
 /METHOD = SSTYPE(3)  
 /INTERCEPT = INCLUDE  
 /PLOT = PROFILE( wrkr\_typ )  
 /PRINT = DESCRIPTIVE  
 /CRITERIA = ALPHA(.05)  
 /DESIGN = wrkr\_typ .

## Univariate Analysis of Variance

### Between-Subjects Factors

	N	
Type of employee	1	3
	2	2
	3	4
	4	173

### Descriptive Statistics

Dependent Variable: q71 Position in Military Sat

Type of employee	Mean	Std. Deviation	N
1	5.000	2.000	3
2	6.500	.707	2
3	3.250	1.708	4
4	3.705	1.521	173
Total	3.747	1.553	182

### Tests of Between-Subjects Effects

Dependent Variable: q71 Position in Military Sat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	21.158 <sup>a</sup>	3	7.053	3.023	.031
Intercept	312.726	1	312.726	134.064	.000
WRKR_TYP	21.158	3	7.053	3.023	.031
Error	415.215	178	2.333		
Total	2992.000	182			
Corrected Total	436.374	181			

a. R Squared = .048 (Adjusted R Squared = .032)

## Profile Plots

## **Appendix I**

### **SPSS Output – The Impact of Administration Support, USUHS Graduation, and Additional Rooms on Overall Physician Satisfaction**

**UNIANOVA**

```

positn BY adm_tech
/METHOD = SSTYPE(3)
/INTERCEPT = INCLUDE
/PRINT = DESCRIPTIVE
/CRITERIA = ALPHA(.05)
/DESIGN = adm_tech .

```

**Univariate Analysis of Variance****Between-Subjects Factors**

	N
1 AT per Provider? 0	105
1	80

**Descriptive Statistics**

Dependent Variable: q71 Position in Military Sat

1 AT per Provider?	Mean	Std. Deviation	N
0	3.419	1.561	105
1	4.062	1.487	80
Total	3.697	1.559	185

**Tests of Between-Subjects Effects**

Dependent Variable: q71 Position in Military Sat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	18.799 <sup>a</sup>	1	18.799	8.033	.005
Intercept	2541.502	1	2541.502	1086.037	.000
ADM_TECH	18.799	1	18.799	8.033	.005
Error	428.249	183	2.340		
Total	2976.000	185			
Corrected Total	447.049	184			

a. R Squared = .042 (Adjusted R Squared = .037)

UNIANOVA  
 posin BY usuhs  
 /METHOD = SSTYPE(3)  
 /INTERCEPT = INCLUDE  
 /PRINT = DESCRIPTIVE  
 /CRITERIA = ALPHA(.05)  
 /DESIGN = usuhs .

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
USUHS Graduate? 0	169
1	19

### Descriptive Statistics

Dependent Variable: q71 Position in Military Sat

USUHS Graduate?	Mean	Std. Deviation	N
0	3.710	1.579	169
1	4.053	1.393	19
Total	3.745	1.561	188

### Tests of Between-Subjects Effects

Dependent Variable: q71 Position in Military Sat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.004 <sup>a</sup>	1	2.004	.822	.366
Intercept	1029.217	1	1029.217	421.903	.000
USUHS	2.004	1	2.004	.822	.366
Error	453.740	186	2.439		
Total	3092.000	188			
Corrected Total	455.745	187			

a. R Squared = .004 (Adjusted R Squared = -.001)

**UNIANOVA**

```

positn BY xtra_rms
/METHOD = SSTYPE(3)
/INTERCEPT = INCLUDE
/PRINT = DESCRIPTIVE
/CRITERIA = ALPHA(.05)
/DESIGN = xtra_rms .

```

**Univariate Analysis of Variance****Between-Subjects Factors**

		N
Additional rooms?	0	111
	1	66

**Descriptive Statistics**

Dependent Variable: q71 Position in Military Sat

Additional rooms?	Mean	Std. Deviation	N
0	3.523	1.513	111
1	3.985	1.574	66
Total	3.695	1.548	177

**Tests of Between-Subjects Effects**

Dependent Variable: q71 Position in Military Sat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	8.847 <sup>a</sup>	1	8.847	3.752	.054
Intercept	2332.756	1	2332.756	989.226	.000
XTRA_RMS	8.847	1	8.847	3.752	.054
Error	412.679	175	2.358		
Total	2838.000	177			
Corrected Total	421.525	176			

a. R Squared = .021 (Adjusted R Squared = .015)

## **Appendix J**

### **SPSS Output – The Effect of Dictation Support on Physician Change in Satisfaction**

```

UNIANOVA
  satsftnx BY dictat_a
  /METHOD = SSTYPE(3)
  /INTERCEPT = INCLUDE
  /PLOT = PROFILE( dictat_a )
  /PRINT = DESCRIPTIVE
  /CRITERIA = ALPHA(.05)
  /DESIGN = dictat_a .

```

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
Dictation Support, .0 2000	147
1.0	44

### Descriptive Statistics

Dependent Variable: Overall Change in Satisfaction

Dictation Support, 2000	Mean	Std. Deviation	N
.0	4.16043	1.16451	147
1.0	4.12405	1.53221	44
Total	4.15205	1.25443	191

### Tests of Between-Subjects Effects

Dependent Variable: Overall Change in Satisfaction

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.481E-02 <sup>a</sup>	1	4.481E-02	.028	.867
Intercept	2324.168	1	2324.168	1469.433	.000
DICTAT_A	4.481E-02	1	4.481E-02	.028	.867
Error	298.937	189	1.582		
Total	3591.731	191			
Corrected Total	298.982	190			

a. R Squared = .000 (Adjusted R Squared = -.005)

## **Appendix K**

**SPSS Output – The Effect of Administrative Technician and Medical Technician  
Support on Physician Change in Satisfaction**

UNIANOVA  
 satsftnx BY adm\_tech  
 /METHOD = SSTYPE(3)  
 /INTERCEPT = INCLUDE  
 /PRINT = DESCRIPTIVE  
 /CRITERIA = ALPHA(.05)  
 /DESIGN = adm\_tech .

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
1 AT per Provider? 0	106
1	81

### Descriptive Statistics

Dependent Variable: Overall Change in Satisfaction

1 AT per Provider?	Mean	Std. Deviation	N
0	3.80936	1.20079	106
1	4.56481	1.20963	81
Total	4.13659	1.25865	187

### Tests of Between-Subjects Effects

Dependent Variable: Overall Change in Satisfaction

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	26.204 <sup>a</sup>	1	26.204	18.058	.000
Intercept	3219.829	1	3219.829	2218.879	.000
ADM_TECH	26.204	1	26.204	18.058	.000
Error	268.455	185	1.451		
Total	3494.481	187			
Corrected Total	294.659	186			

a. R Squared = .089 (Adjusted R Squared = .084)

## UNIANOVA

satsftnx BY med\_tech  
 /METHOD = SSTYPE(3)  
 /INTERCEPT = INCLUDE  
 /PRINT = DESCRIPTIVE  
 /CRITERIA = ALPHA(.05)  
 /DESIGN = med\_tech .

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
2 MTs per Provider? 0	85
1	102

### **Descriptive Statistics**

Dependent Variable: Overall Change in Satisfaction

2 MTs per Provider?	Mean	Std. Deviation	N
0	3.83431	1.21461	85
1	4.39338	1.24621	102
Total	4.13926	1.25995	187

### **Tests of Between-Subjects Effects**

Dependent Variable: Overall Change in Satisfaction

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	14.491 <sup>a</sup>	1	14.491	9.548	.002
Intercept	3138.586	1	3138.586	2067.950	.000
MED_TECH	14.491	1	14.491	9.548	.002
Error	280.780	185	1.518		
Total	3499.231	187			
Corrected Total	295.271	186			

a. R Squared = .049 (Adjusted R Squared = .044)

## **Appendix L**

### **SPSS Output – The Effect of MAJCOM on Physician Desire to Remain in the Military**

UNIANOVA  
 separate BY majcom  
 /METHOD = SSTYPE(3)  
 /INTERCEPT = INCLUDE  
 /PLOT = PROFILE(majcom)  
 /PRINT = DESCRIPTIVE  
 /CRITERIA = ALPHA(.05)  
 /DESIGN = majcom .

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
MAJCOM 1	28
2	41
3	34
4	6
5	7
6	32
7	17
8	1
9	18

### Descriptive Statistics

Dependent Variable: q75 Likelihood of Separation

MAJCOM	Mean	Std. Deviation	N
1	2.286	1.782	28
2	2.341	2.020	41
3	2.676	1.683	34
4	2.667	1.862	6
5	2.714	1.496	7
6	2.656	2.089	32
7	3.412	2.373	17
8	4.000	.	1
9	3.333	1.455	18
Total	2.679	1.902	184

### Tests of Between-Subjects Effects

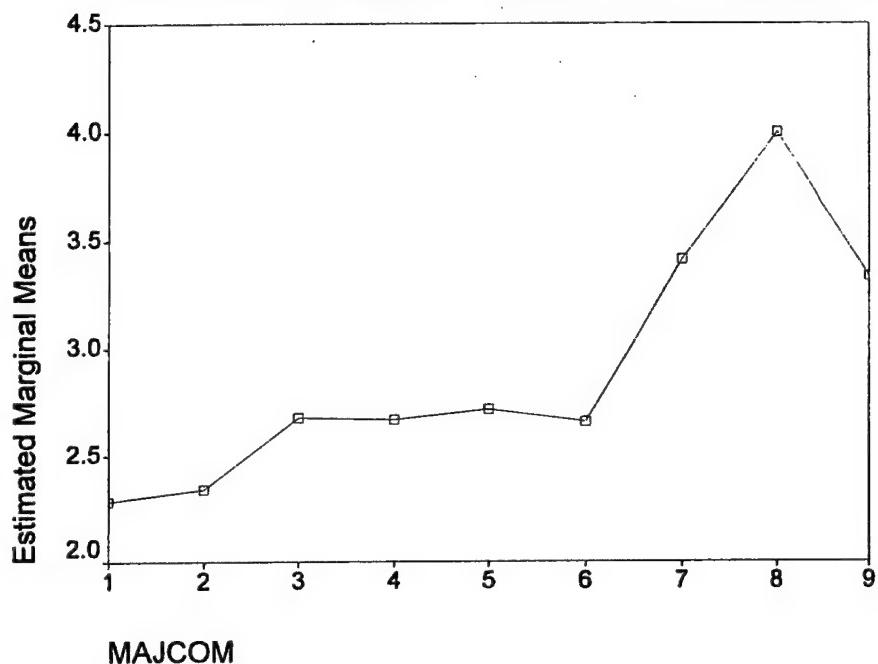
Dependent Variable: q75 Likelihood of Separation

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	27.608 <sup>a</sup>	8	3.451	.952	.475
Intercept	440.532	1	440.532	121.507	.000
MAJCOM	27.608	8	3.451	.952	.475
Error	634.473	175	3.626		
Total	1983.000	184			
Corrected Total	662.082	183			

a. R Squared = .042 (Adjusted R Squared = -.002)

## Profile Plots

### Estimated Marginal Means of q75 Likelihood



## **Appendix M**

### **SPSS Output – The Effect of Gender on Satisfaction with the Workload**

UNIANOVA  
 pace BY gender  
 /METHOD = SSTYPE(3)  
 /INTERCEPT = INCLUDE  
 /PRINT = DESCRIPTIVE  
 /CRITERIA = ALPHA(.05)  
 /DESIGN = gender .

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
gender 0	740
1	549

### Descriptive Statistics

Dependent Variable: q3 Pace of Work Sat

gender	Mean	Std. Deviation	N
0	3.775	1.539	740
1	3.780	1.566	549
Total	3.777	1.550	1289

### Tests of Between-Subjects Effects

Dependent Variable: q3 Pace of Work Sat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	6.667E-03 <sup>a</sup>	1	6.667E-03	.003	.958
Intercept	17987.633	1	17987.633	7479.545	.000
GENDER	6.667E-03	1	6.667E-03	.003	.958
Error	3095.119	1287	2.405		
Total	21483.250	1289			
Corrected Total	3095.126	1288			

a. R Squared = .000 (Adjusted R Squared = -.001)

## UNIANOVA

wk\_load BY gender  
 /METHOD = SSTYPE(3)  
 /INTERCEPT = INCLUDE  
 /PRINT = DESCRIPTIVE  
 /CRITERIA = ALPHA(.05)  
 /DESIGN = gender .

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
gender 0	741
1	550

### Descriptive Statistics

Dependent Variable: Overall Sat Workload

gender	Mean	Std. Deviation	N
0	3.99359	1.37449	741
1	3.99545	1.45906	550
Total	3.99438	1.41058	1291

### Tests of Between-Subjects Effects

Dependent Variable: Overall Sat Workload

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1.098E-03 <sup>a</sup>	1	1.098E-03	.001	.981
Intercept	20148.574	1	20148.574	10118.361	.000
GENDER	1.098E-03	1	1.098E-03	.001	.981
Error	2566.771	1289	1.991		
Total	23164.813	1291			
Corrected Total	2566.772	1290			

a. R Squared = .000 (Adjusted R Squared = -.001)

## **Appendix N**

### **SPSS Output – The Effect of Gender on Hours Worked per Week**

UNIANOVA  
wrkwk\_a BY gender  
/METHOD = SSTYPE(3)  
/INTERCEPT = INCLUDE  
/PRINT = DESCRIPTIVE  
/CRITERIA = ALPHA(.05)  
/DESIGN = gender .

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
gender 0	608
1	489

### Descriptive Statistics

Dependent Variable: Hours worked/week, 2000

gender	Mean	Std. Deviation	N
0	47.099	7.098	608
1	49.011	8.266	489
Total	47.951	7.696	1097

### Tests of Between-Subjects Effects

Dependent Variable: Hours worked/week, 2000

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	991.288 <sup>a</sup>	1	991.288	16.981	.000
Intercept	2503474.032	1	2503474.032	42884.700	.000
GENDER	991.288	1	991.288	16.981	.000
Error	63922.660	1095	58.377		
Total	2587273.353	1097			
Corrected Total	64913.948	1096			

a. R Squared = .015 (Adjusted R Squared = .014)

UNIANOVA  
leisure BY gender  
/METHOD = SSTYPE(3)  
/INTERCEPT = INCLUDE  
/PRINT = DESCRIPTIVE  
/CRITERIA = ALPHA(.05)  
/DESIGN = gender .

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
gender 0	738
1	549

### **Descriptive Statistics**

Dependent Variable: q1 Leisure Time Sat

gender	Mean	Std. Deviation	N
0	4.234	1.595	738
1	4.226	1.674	549
Total	4.231	1.628	1287

### **Tests of Between-Subjects Effects**

Dependent Variable: q1 Leisure Time Sat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.302E-02 <sup>a</sup>	1	2.302E-02	.009	.926
Intercept	22533.046	1	22533.046	8490.100	.000
GENDER	2.302E-02	1	2.302E-02	.009	.926
Error	3410.439	1285	2.654		
Total	26447.000	1287			
Corrected Total	3410.462	1286			

a. R Squared = .000 (Adjusted R Squared = -.001)

**Appendix O**

**Written Comments on Staff Satisfaction Surveys**

**Appendix O**  
**Written Comments from Staff Satisfaction Surveys**

**OVERALL PCO COMMENTS**

**Negative –**

E7, Med Tech – “I realize that cost effectiveness was probably at the heart of the new directives. What I would have done differently is to have improved the facilities and increased manning prior to making PCO implementation a mandate. What we have now is organizational charts that look like they will work, but in reality cannot function.”

E5, Med tech – “True optimization is not possible in the military without extra manning. We do so many things that are not done in the civilian world. PRP record reviews, EPRs, mobility, readiness, and details all pull support staff from our number one mission, taking care of patients.”

E7, Med tech – “I’ve never wanted to retire more than I do now! Some things are great about PCO, but there are many things that are not thought out.

O2, Nurse – “I love being a part of the Air Force. I have always thought I would stay in for 30 years. Yet, because of PCO I am doubting my determination. If, in my next assignment, I am only offered a job on a PCO team I will separate.”

O3, Nurse – “PCO has turned me into a paper pusher. I cannot wait to leave. I would not advise any nurse to consider joining the Air Force.”

O3, Physician – “PCO is nothing new – we did it in the civilian world for years, but in the civilian world, techs are adequately trained and not pulled for non-medical tasks. The medical support staff work at a much higher level of competence in the civilian world. The inefficiencies of our clinic are not PCOs fault, but so far in the implementation of the program I haven’t seen much change.”

O3, Nurse – “I had expected to stay in the military 20 years. Now I’m counting the days until I can get out. If I was used effectively in the clinic, if I made a difference, I would stay in.”

O3, Physician – “I’m at \_\_\_\_\_. I am the only adult PCM that has been “optimized”. Even though I’m optimized on paper, the reality of the situation here is that my support staff does not meet the model. Technically, I have 2 techs,  $\frac{1}{2}$  nurse and 1 admin tech assigned to me as a team, but the other three providers who share the same work space have to share  $\frac{1}{2}$  nurse, 2 techs and no admin tech among themselves. In reality, the 1 nurse, four med techs and 1 admin tech work together to support all three doctors just like they did before optimization. Optimization is a smoke screen...no real changes.”

O3, Physician – “Right now PCO is great! We have additional support staff and are seeing patients more efficiently. Unfortunately, things will soon change. Because of PCO enrollment standards I am losing my partner and I will need to care for the 2100 enrollees by myself. My administrative load will double and my patient care load will double. I’m glad I only have one more year. Had I continued to have a partner I probably would have stayed in the military, but not now...I’m out of here!”

Contractor, HCI – “I doubt that my position would exist if we didn’t have PCO. I support the concept, but we’ve not been given the support we need to make it work as well as it should.”

O5, GPM – “The biggest gap in PCO is the lack of officer and NCO leadership in each optimized clinic. The second biggest gap is the lack of resources to do the job well. Administrative personnel staffing was underestimated in the original model.”

O3, PA – “I don’t like cattle call medicine.”

O3, Physician – “PCO is a good concept, but we are enrolling at too high a level. I’m so busy taking care of my 1500 patients that I am getting burned out. I don’t get paid enough for this. Good-bye.”

O4, Nurse Practitioner – “PCO is a great concept but we do not have the resources to do it correctly.”

GS11, Nurse – “Good plan, but several items were not factored into the plan. Exercises, deployments, other duties, minor surgery, illness, vacation all put a burden on maintaining patient load.”

O3, Nurse – “The workload is incredible and the patients can be exhausting and frustrating.”

O1, PA – “The concept of optimization is a good one, but the implementation has been poor. It is driven by metrics forcing productivity before enabling productivity with increased support.”

GS11, Nurse – “Optimization is a good concept, has great opportunity. Unfortunately, with AF duties, staff is continuously pulled for other duties (TDY, readiness, training). Our teams are never fully staffed and those left have great difficulty keeping the concept working.”

O4, Nurse – “I have always embraced change – never ran from challenges – but too many things are changing without thinking the process through. Our voices are not being heard.”

O2, PA – “No real changes seen except for more meetings to talk about it and a requirement to see 25 patients per day.”

O3, Physician – “Optimization is negative here because we are forced to meet productivity standards without really being optimized. Optimization on paper is depressing for all involved. I hope it is really working somewhere. It is a nice idea.”

O4, Nurse Practitioner – “I enjoyed the autonomy and direct patient contact of being a nurse practitioner that is why I did not pursue the administration track. Now with PCO the most important issue is metrics. Medical readiness is declining because we focus all of our time on patient care. If I had wanted to work in an HMO I would not have joined the Air Force.”

GS9, Nurse – “Need more staff if this is to work. Please hurry!!”

O3, Physician – “Undermanned and overworked but still expected to make quota – morale horrible – and no one cares. I will likely leave the Air Force because of treatment like that!!”

O3, GPM – “PCO is a great concept, but it does not account for the mobility mission in addition to all the programs needed to be sustained for PCO to be effective as a healthcare model. The military is not equipped to be an integrated delivery system over a sustained period of time.”

E6, Med tech – “Love the concept, reality need a lot of work.”

O3, Physician – “I have an 8 year obligation. If I have any chance to get out earlier, I will immediately take it.”

O4, Physician – “The problem with PCO is that we are working our people too hard. I’m not sure if the manpower model is accurate. We are working at a pace that is not sustainable, and there is no light at the end of the tunnel. Just more staff cuts, more programs to implement and no time to do it.”

O4, Physician – “PCO is a great idea if manned full-time. PCO members should be off-limits for bay orderly and other duties assignable to non-PCO personnel.

O3, Physician – “PCO can work if a provider actually has the support staff that is needed. At our base military duties, leave, low manning, training, etc all reduce support dramatically. This in turn forces the provider to run faster and longer to keep up with the comprehensive demands of PCO.”

O3, Physician – “Demanding doctors do mindless administrative tasks will drive the ones who are good at patient care out of the military and retain the mediocre ones.”

E4, Admin Tech – “I did not join the military to be a secretary”

GS4, Med Tech – “Other people in the clinic treat us bad at times. They think we have it easy because we have ‘extra’ manpower. We usually do not have a full team. We frequently support other providers.”

O3, Nurse – “Optimization could work, but technicians are being pulled almost daily because other parts of the clinic are short of staff.”

E6, Med tech – “When the PCO SAV team makes comments that, as an NCOIC my job is essentially an “additional duty” and that what I’ve been doing in the past will simply go away seems to devalue my worth to the medical corps.”

O4, NP – “The concept of PCO is excellent, however, it is hampered by the inability to maintain trained staff members. Balancing military, clinical and administrative duties is almost impossible.”

E3, Admin Tech – “I would like to stay in the Air Force, but would like to leave PCO. I spent 15 months in medical records and I feel like I’m back where I started.”

E5, Medical Technician – “Overall, PCO is a great idea and looks fantastic on paper but the reality of it is not as rosy. We need support from above to keep our people from getting pulled from us so much so that the PCO concepts can be properly implemented. Until that time we have rough waters ahead.”

O3, Nurse – “PCO is a good idea, but we were forced to implement it without adequate resources!!”

O4, Physician – “I am not unhappy with PCO per se but rather the competing demands. We need to optimize but CPO must be taken in conjunction with other responsibilities, medical readiness, PHA, training, CME, etc. etc. Right now I get the feeling that primary care providers are viewed as resources to be used up – exploited. I predict that retention is going to be a huge problem in the AFMS. I am not at all unhappy with the local leadership. We are doing the best we can. The vision at the Air Force SG level needs to be more realistic.”

O4, Physician – “While the team concept is an improvement, my stress levels and inability to exercise during the day and my longer hours drive my decision to leave the Air Force.”

O4, Physician – “On paper PCO is every doctor’s dream practice. In reality we are being asked to do more with less. I feel like a factory worker with a quota. Each month I must see 525 patients if I work one day or 30 days.”

O4, Physician – “PCO is an excellent way to improve quality for patient care. It helps me provide care more efficiently when it is done appropriately.”

O3, Nurse – “I feel that PCO has made a positive change for both patient care and military job satisfaction.”

E6, Med tech – “PCO has given us the spark to do better by being more efficient at what we do. I love the PCO concept.”

O3, Physician – “Overall PCO is a definite improvement in efficiency and support to me as a provider. Thanks.”

O3, Physician – “Better efficiency and support. Thanks.”

E3, Med tech – “PCO is much better organized than the old system!”

O4, Physician – “In regards to patient care, continuity, the family practice concept, etc, PCO is great! The problem is, we are trying to enroll too many patients to our panels.”

O3, Nurse – “I really think that once the dust settles PCO will be a great experience. It will provide the means to accomplish quality patient care. Starting the training from the bottom up was right, but maybe should have been reinforced to the local medical leadership”

GS4, Med Tech – “Working with the team is overall great. I really enjoy working as a team.”

E5, Admin Tech – “I live the idea of “PCO”. I have never been more challenged in my AF career.

O1, PA – “Being relatively new to the field, I have had the opportunity to talk to my classmates and note that those involved in an optimized clinic are much happier. They have a greater degree of job satisfaction and self worth provided the optimization is done correctly and that there is adequate support staffing.”

O4, Physician - “We are on the right track. We just need to stay the course, work through the adjustments, and stay focused.”

## AUTONOMY

Negative –

O1, PA – “I do not like the pharmacy restrictions that they put on the PAs here.”

O4, Physician – “This 25 pt/day, 21 days/month is an unattainable goal but we are pressured to try to meet the goal. Never can, never will.”

O4, Physician – “To make any change in my schedule under PCO is like pulling teeth. Unlike every other officer in the military, I have no control over what I can accomplish on a work day.”

O3, Nurse – “I feel trapped!! I see something that could be improved and everyone’s first answer is no. We have one purpose – to push patients in and get them out! Who cares if we can’t fix their problem!?”

E4, Med tech – “The changes that our team tries to make are never implemented...probably shot down at the squadron commander level.”

E4, Med tech – “It’s very hard to make changes in the work schedule. One tech has to be with the physician at all times. This is something hard to do when you take into account leaves, TDYs, training, bay orderly, and other military needs not associated with the clinic.”

E5 Med tech – “Before PCO I was able to take leave at the drop of a hat because other team members were able to cover for me. Now I have to request leave one year in advance and if anything comes up, like a school play for my child, SORRY!! This is the reason I will separate from the Air Force after 9 years active duty.”

O4, Physician – “25 patients per day is a sacred cow. Because our schedules are often so far ahead (6 weeks), it is nearly impossible to change templates to meet seasonal demands when required. It is also difficult when I need to schedule time off for appointments of my own.”

E5, Admin Tech – “I feel that the 4As are completely at the mercy of the 4Ns and we need a 4A chain of command.”

O4, Nurse Practitioner – “The providers seem to have no say in initiating PCO changes despite our complaints. We are told by the element leader/NCOIC that we do not have enough manpower.”

E3, Med tech – “No one listens to our ideas. They are rejected so frequently that we quit trying to find better ways to do things.”

GS5, Med Tech – “Nobody asks for our input or listens when we make suggestions.”

O4, Physician – It is sometimes difficult to provide the best medical care for my patients because of restrictions on pharmaceuticals.”

O1, PA – “I do not like the pharmacy restrictions that they put on the PAs here.”

O4, Physician – “This 25 pt/day, 21 days/month is an unattainable goal but we are pressured to try to meet the goal. Never can, never will.”

O4, Physician – “To make any change in my schedule under PCO is like pulling teeth. Unlike every other officer in the military, I have no control over what I can accomplish on a work day.”

Positive –

E3, Med tech – “Everyone is pretty good at adjusting the schedule if necessary.”

E5, Admin Tech – “I have the ability to suggest and make changes. I feel empowered.

## COMPENSATION

Negative –

O3, Nurse – “I think it will be difficult to be promoted from this position. When I am taking care of patients 10 hours per day it is difficult to find time for additional duties, career advancing courses...”

O5, NP – “I wish that my promotion was based on my ability to provide excellent patient care. Unfortunately it rests on completion of Air War College and holding leadership positions. PCO makes it very difficult to attend AWC (seminars in the afternoon when I’m finishing up my patient care) and limits the amount of time I have for administration/leadership.”

GS6, Admin Tech – “When PCO came on I was told that my job description would change and that I would be upgraded. That was almost a year ago. Nothing has happened, and nothing is in the works. There is no promotion opportunity here...no one has time.”

O3, Physician – “The technicians have difficulty earning “bullets” for their EPRs in order to compete for promotion. They are completely tied to their jobs and do not have time for extra duties. These are the things that make them look good on the EPRs and will probably result in them being promoted at a lower rate than their cohorts.”

E4, Admin tech – “I am underpaid for the level of work I perform. The officers in the clinic will bypass the master sergeant over me and come right to me with questions/needs. I get recognized for all of my efforts, but promotion is still slow.”

E5, Med Tech – “Longer work hours, same pay, no overtime, additional costs for child care...”

O4, Nurse Practitioner – “As a nurse practitioner, the PCO concept will not aid in my prospects for promotion. I must see an average of 25 patients per day, this leaves little time for anything else. My priority as a PCO provider is patient care, but that is not enough to get selected for promotion.”

O3, Nurse – “I am working 50-60 hours per week without overtime pay.”

E5, Med tech – “Give all personnel incentive pay and not just first term airmen.”

E6, Med tech – “Pay is not enough for the demands of PCO. We are doing more and more and don’t see any monetary gain.”

O3, Nurse – “Very little individual recognition.”

O3, Physician – “Although we get bonuses, we are required to pay our own license fees, board exam fees, DEA registration, AAFP membership dues, etc. That would all be paid in private practice. Thousands of dollars of my own money.”

O4, Physician – “The PCO team members are, I believe, the hardest working members of the Medical Group. The amount of recognition given is not equal to what we do. Part of that is because PCO does not allow time for additional duties – things that are needed on OPRs and for awards.”

GS9, Nurse – “No opportunity for advancement, dead end.”

O4, Physician – “Very dissatisfied with extra work required of us to be promoted. Doctors should not have to attend same schools as the line officers in order to get promoted. We need to study and take courses to maintain our professional credentials.”

E4, Med Tech – “My unit needs to work on giving awards to more people, or at least recognizing a job well done.”

E4, Med Tech – “Doing triple the work for the same—below poverty level pay.”

O3, Nurse – “Phone triage is a disappointing dead end to a nurse’s career.”

O3, Physician – “I have less time to spend in extra duties, innovations, and leadership. All of my time is spent taking care of patients. I think this decreases my opportunities for promotion.”

E4, Admin Tech – “My supervisor is so busy with patient care that I am not put in for awards that I could probably win. More work, less recognition.”

O3, Physician – “Physicians are unlikely to stay in the military in this type of environment. No one seems to be concerned about this fact.”

O4, Physician – “I work too many hours for the pay.”

O4, physician – “Providers are never recognized for providing quality continuous care for our patients. Awards are probably not needed, but a thank-you from the local medical leadership would be nice.”

E6, Med tech – “Losing a title such as NCOIC means a lot. As a “team leader” I lose standing among other AF NCOs and my possibility for promotion is diminished.”

Med Tech Contractor – “As contracted personnel we don’t get recognized for annual civilian awards like the GS employees. That needs to change.”

E4, Med Tech – “More work without extra pay.”

O4, Physician – “Still necessary to do additional duties to get promoted, only the time to do them starts at 1700 after a 9 hour day.”

O4, Physician – “What you need to realize is that family practitioners could make more money on the outside. What draws us to the military is comraderie and lifestyle (family time). For me, the lifestyle is what counts. Working 65-75 hours per week with 5 minute lunch hours is not a “retainable” situation”

O4, Physician – “I work like a civilian doc and get paid a whole lot less.”

**Positive**

GS9, Nurse – “Management is looking into upgrading us. I believe that management appreciates the job we do. They recognize us which increases morale.”

## TREATMENT TEAM EFFICIENCY

Negative –

O3, Nurse – “The requirement to see 25 patients per day goes against good principles of managed care. If we manage our patients well we may take care of many of their needs without them needing to see a provider. The 25 patients per day metric encourages us to herd them in.”

O3, Nurse – “Overemphasis on getting “been counts” for every patient encounter. I can’t even talk to a patient without feeling pressure to write everything down so “someone” is given credit.”

O4, Physician - “We have a very effective nurse triage system, which, when implemented diminished the number of actual booked appointments by 30 to 35%. But this “looked bad” on productivity reports because of the ancient metric of ‘25 visits per day’. There is pressure to ease off of triage in order to increase booked appointments again. Does not pass the common sense test! My Docs are seeing an average of 19 to 20 patients per day. Our access is terrific, and our customer service numbers put us as one of the top 20 in DOD. Now that’s productivity. We need to drop the pressure on the 25/day metric and focus on quality, access and patient satisfaction for our productivity measure.”

O4, NP – “There is too much focus on # of patients seen by providers and not enough focus on demand management, wellness, and access.”

O3, Physician – “I am deeply disappointed with how inefficient military medicine is. My recruiter greatly misrepresented reality.”

O3, Physician – “We are cranking out bean counts, but what do they mean? When I see a complicated patient and take 30 to 40 minutes for a complete evaluation and workup it counts the same as a routine ear infection. I’m incentivised to refer all of the complicated patients downtown and just keep the healthy children. Preventive care is also suffering. It takes time and is not counted unless the patient makes another appointment.”

Contractor, Physician – “TRICARE is not user friendly. They need to have a POC that I can call when I need to find a lost consult. Instead I call the 1-800 number and wait. I am frustrated with trying to help my patients through the TRICARE system.”

O3, Nurse – “We take care of an older, retired population. The providers always run behind because they are not able to take care of everything in 15 minutes. Most patients come in with at least 2 complaints. They are furious when told they need to pick one problem and make another appointment to discuss the other problem.”

O3, Physician – “We certainly see more patients each day, but I doubt that it is because of increased efficiency, it is because we work longer hours than we used to.”

O3, Physician – “Much of my day is taken up doing things that civilians would not have to do when caring for their empanelled patients. EPRs, OPRs, exceptional family member clearance, and drug utilization studies definitely detract from my ability to see patients and follow-up with them in a timely manner.”

E4, Med tech – “We need to educate our patients on how to manage their own colds. We waste so much time seeing stuff that I never went to the doctor for when I was a kid.”

O4, Nurse – “PCO does not have any extra manning to cover for leaves, TDYs, military taskings, and training. We usually only have 4 of the 5 team members available for duty. Sometimes only 3 of us are available.

O2, PA – “We need to minimize the amount of time that the providers have to work with a suboptimized team. We cannot continue to work at optimized levels of production with suboptimized teams.”

GS6, Nurse – “At this facility we do not have nurse triage until central appointments have filled all of the appointments, including the same day appointments. After this we are left with what to do with patients who really need to be seen. It takes a tremendous amount of work on our part to squeeze them in with the provider. This needs to change. We should control all of the same day appointments!”

GS9, Nurse – “We should charge a small fee for outpatient visits. The military personnel want to see a provider for all of their complaints, no matter how small, and they do not want to pay for OTC meds. We could release some of the nurses from nurse triage and allow them to support their provider if they did not have to do so much telephone triage.”

GS9, Nurse – “We are more efficient, but at what cost? I think it would be better to see less patients and do a great job than to run them in and out like cattle. As it has gotten harder to see a provider, the patients have gotten more demanding, many are rude. I think we are enrolling too many patients to each provider.”

E3, Med tech – “Central appointments is confusing and stressful for patients. They can’t get through to the appointment clerk, and then are scheduled with the wrong provider.”

O3, Nurse – “The focus on patient counts causes providers to provide care less efficiently. Frequently all that a patient needs to take care of his problem is a telephone consult, however, telephone consults are not counted as a patient visit. Many providers waste the patient’s and the staff’s time by having the patient come in to be seen so that they can get ‘credit’ for the visit.”

O3, Nurse – “Our family practice clinic is ‘optimized’, but the support staff have so many additional duties (immunizations, readiness, etc) that we are still short the support staff that we need to maximize our efficiencies.”

O4, Nurse Practitioner – “As a PCO we are in essence an “HMO” under TRICARE. Therefore we are responsible for our patients 24 hours per day. That is very difficult with the military readiness, exercises, and other training that takes us away from patient care.”

O4, Nurse Practitioner – “The nurses do an outstanding job with triage and patient education, yet we still have a large number of patients who come in for simple colds and other things that could be managed at home.”

E3, Med tech – “Scheduling is a nightmare. Providers sometimes schedule one patient for an hour, but then finish in 20 minutes. Patients are always needing more appointments.”

O4, Nurse – “25 patients per day is a ridiculous metric! In order to meet that standard we insist that each appointment be limited to one complaint. It is incredibly annoying to the patient and the staff to have to schedule separate visits for unrelated problems.”

O4, Nurse practitioner – “Medical techs are tasked to do non patient care duties (bay orderly). This disrupts the flow of work in the team and makes the rest of the team work longer and harder. The appointment clerks also need to be better trained to schedule patients into an appropriate time slot with their provider.”

O4, Physician – “We do not have enough administrative techs. Our personnel who should be providing medical care have to cover the front desk, answer the telephone, and check people in.”

O4 PA – “KG-ADS takes extra time to input the diagnosis. This makes me less efficient.”

O3, Nurse – “Taking care of patients with acute illnesses when all appointments are filled is a real problem. It takes seven different interpersonal interactions to make it happen in our ‘optimized’ clinic.”

O3, Physician – “How many private medical practices would require their providers to do chart reviews, develop disease management strategies, accomplishing credentialing, ect, ect, without time off to do the extra duties?”

O3, Physician – “Our record system is very poor. A dictation service and computerized records would greatly decrease our workload.”

O3, Physician – “Military physicians need dictation systems! Civilians would laugh at the hours we spend writing illegible long-hand notes. This would boost productivity and improve documentation.”

O3, Physician – “We need a dictation service, not voice recognition software.”

O3, Physician – “If we want to generate accurate data on patient care we need to pay for professional coders. MDs and untrained techs will not give an accurate reflection of the level of care that a patient receives. These inaccuracies make us look bad.”

E6, Med tech – “There is no way to account for the excessive number of walk-ins that we see. Why bother calling for an appointment? Just show up and get walked in.”

O3, Nurse – “Central appointments is a nightmare. Patients are not assigned to correct PCMs.”

E3, Admin Tech – “Patients wait up to one hour and frequently only need a medication refill.”

O3, Nurse – “With ‘open access’ since health care is free, patients want appointments for every little thing same day. This puts HUGE demands on patient education and encourages dependency rather than encouraging responsibility for their own health care.”

O4, Physician – “My administrative workload impacts on my ability to care for patients. OPRs, ADS, PRP, chart reviews, JCAHO, OIs, charting...”

O4, Physician – “My patients waste time in the waiting room because of the number of walk-ins that we have to squeeze between scheduled patients.”

## FACILITY/EQUIPMENT

Negative –

O3, Physician – “We store all our medical records in the room we used to use for screening. Now we screen our patients in the waiting room. Poor for patient privacy, very unprofessional.”

Contractor – Physician – We had to change locations to get more exam rooms. Now our clinic is split into several areas and the flow of patients has been disrupted. Each day a patient complains that they don’t like our new location.”

E5, Med Tech – “The check in is the bottle neck of patient flow in the clinic. We need more rooms to check in patients or equipment to allow us to check in patients in the exam rooms.”

Contractor, HCI – “This clinic is cursed with a very inefficient layout. Medical supply has been decentralized, because of this we frequently run out of basic items. The person who used to monitor such things and order in advance is now a member of one of the teams.”

O5, GPM – Our facility is the oldest in the Air Force. The layout of the clinics is grossly inefficient. Equipment that was needed to improve the efficiency of the teams was requested last year, but was not purchased – not enough money. We are still waiting on the equipment this year...”

O4, Nurse – “The team members offices and work spaces are not collocated.”

E4, Admin tech – “Administrative personnel do not have a computer or a work center or a desk. Hard to feel like a part of the team in these circumstances.”

E5, Admin tech – “The physical layout is not conducive to a PCO. In order to make PCO work like it should, the records should be in the clinic, without which the PCO should be discarded.”

O3 Nurse – “Exam rooms are small, should be larger. The providers and support staff are separated in the clinic layout making it difficult for them to work together. This brand new clinic was not designed with PCO in mind.”

O3, Nurse – “We have a brand new facility, but it was not built with the PCO team in mind.”

O3, Nurse – “Our supply is terrible. We are always out of something and the individual in charge of supply never restocks the rooms correctly.”

GS13, GPM – “There is a definite need for a building update to go with the PCO concept. The building is old and designed for different purposes.

E3, Med Tech – “We need more screening rooms. That is the bottleneck in this clinic.”

O3, Physician – “We do not have dedicated offices or exam rooms. I feel like a transient.”

O4, Physician – “The supply system is not tracked and no one takes responsibility for procuring necessary supplies.”

O4, PA – “Providers rooms too far from exam rooms, computers not up in each exam room. Will improve when construction is finished. PCO implementation too fast and remodeling too slow.”

O4, Physician – “Currently PCMs have two exam rooms each. However, we have extra providers that don’t have any exam rooms. They frequently share our two exam rooms. I feel like we are playing a shell game. We tell the senior leaders what they want to hear, but in reality it is business as usual.”

E4, Med Tech – “Our clinic is affectionately known as ‘McGyverville’ because we have to rig everything up for treatments.”

E4, Admin Tech – “We do not have the space to work comfortably or effectively. We have too many people sharing a very small space.”

O3, Nurse – “We are still working to get the phone system up to standard so that triage can be accomplished effectively.”

E6, Med tech – “We need the physical structure to support PCO. We are trying to put the cart before the horse.”

O3, Nurse – We have 2 exam rooms per provider, but no room for the nonproviders. We share offices, desks and bookcases. Space is a major concern!

O4, Nurse Practitioner – “We need more treatment rooms.”

E4, Admin Tech – “We need our own record room in our clinic to reduce the time spent going back and forth.”

E5, Admin Tech – “I am the only 4AO in the Primary Care Flight. Another MSgt is supposed to be assigned, but he is never here. I don’t have a desk of my own, no place to store my things and to retreat to at lunch time. The front desk is where I normally do my work.

E3, Admin Tech – “The records section is not large enough.”

O3, Nurse – “The layout cannot really be changed and is not conducive to teamwork. Nurses/techs need to be located near doc and his treatment rooms.”

Positive –

O3, Physician – “Expanding our number of exam rooms was a great move, but it was accomplished without the supplies and equipment necessary to fully utilize the rooms.”

## ORGANIZATION/LEADERSHIP

Negative –

E7, Med Tech – “This plan denigrates the senior enlisted corps. I’m back to doing what I was doing 20 years ago.”

O2, PA – “Our medical leadership doesn’t really care about patient care. They just want to get themselves promoted.”

O3, Physician – “There is a great interest in numbers, but a refusal to count all of our workload or to provide the appropriate support.”

E5, Med Tech – “The senior medical leadership of the Air Force is enacting a policy that they have never lived. They should have tested the concept before implementing it throughout the Air Force.”

O3, Provider – “The local medical leadership communicate very little with us. They seem to have very little appreciation for how hard we work.”

Medical Tech – “Group senior leadership are putting too many tasks on medical technicians creating an extremely stressful environment. Many people are leaving the military because of these stressors.”

O5, NP – “It is truly frustrating when we are told to do more with less, I don’t blame the local medical leadership, they do not have the personnel to adequately staff us.”

Contractor, HCI – “Many aspects of PCO were not well thought out at the senior medical leadership level.”

GS6, Admin Tech – The Air Force Leadership seems to change what was said at the PCO conference. What we are doing here at the base is very different than we were told it would be.”

GS9, Nurse – “We work harder than any other section of the group, but we are the last to receive support from the local medical leadership. Immunizations is out of hide, no extra manning. PHA was accomplished by 8 full-time support staff, caring for 80 patients per day, it is now the responsibility of our ‘optimized’ team – no extra manning. Referrals were done at managed care. Now they are done here – no extra manning. Something has to give!”

O2, Nurse – “PCO as espoused by the Air Force medical leadership is idealistic and is sometimes not practical for the best (or most efficient) medical care. The senior leadership needs to give some latitude to accommodate local MTFs.

O4, Physician – “I do not feel that the Air Force leadership is listening to feed back from those of us who are in the trenches. The biggest example of that is the absolute insistence on 1500 enrollees per provider even when statistics prove this impossible.”

O3, Nurse Practitioner – “Too much emphasis on meeting access standards with little consideration to much else.”

O4, Nurse – “What is the senior Air Force medical leadership doing to the nurse corps? There should be one entry level for nursing, the BSN. They plan to modify our force structure and the training of our personnel without our input.”

O3, Physician – “The people in command care little about us, the workers. All they care about is 25 patients per day.”

O4 – Nurse practitioner – “The nurse corps has been demoralized by the Air Force Medical Leadership.”

O4, Physician – “The clinic commander micromanages our operations.”

O3 GPM – “The local leadership put a lot of money into improving the administrative areas of the facility and we still are struggling with a lack of patient care rooms.”

O3, Nurse – “The Air Force medical leadership won’t listen when we tell them what we need to staff our clinic even though we are the “benchmark” for PCO.”

O4, Physician – “The Air Force medical leadership do not understand the implications of their mandates. They do not understand that PCO is not sustainable as it currently is outlined.”

O4, Group Practice Manager – “The Air Force medical leadership needs to make a choice, readiness or access. If we need to provider care for these people with this small team we should not be called for special assignments and deployments.”

O3, Physician – “Very frustrating to have results demanded before resources are provided to meet the results. I am forced to meet productivity goals without enough nurses, med techs, dictation system, or coders.”

O3, HCI – “Commanders need to know that the HCI role is not an additional duty!”

O5, Operations Squadron Commander – “We do not have enough support staff to fully optimize all of our providers. We are told to optimize 2 or 3 providers out of the 8 providers that work side by side in the clinic. The only way that we can optimize these providers is to suboptimize our other providers even further. If we direct the technicians and nurses on the optimized teams to only support their providers we lose teamwork in the clinic and staff morale suffers. I cannot tolerate this, but I can't stand the heat from MAJCOM to not optimize a few teams. Therefore, on paper it looks like we have optimized two teams, but in reality it is business as usual, only now we whip the staff to see more patients.”

O3, Nurse – “I don't feel much support from the local leadership. They say that PCO is a priority, but they take our techs to augment transportation, security, immunizations, honor guard, etc.”

O3, Nurse – “The local leadership expects too much—too many taskings—not enough time and resources!”

O4, Physician – “The Air Force SG is out of touch. He has never had to slug it out in a primary care clinic, much less with PCO.”

O4, Physician – “The local medical leadership was slow to restructure manpower to increase support to the teams, but quick to demand an increase in productivity to 25/day.”

O4, Physician – “A grand plan to get rid of MDs with one stroke of the pen making a 1500:1 ratio which doesn't take into account that military people use the health care system three times as often as civilians. Now they get rid of more MDs by bringing in 50% physician assistants thus doubling the call workload by the MD with another pen stroke.”

Positive –

E6, Med Tech – “Squadron and group commanders go the extra mile for their troops. Their motto is ‘taking care of those who care’.”

E5, Admin tech – “We are fortunate to have good leadership. The 4Ns and nurses try to understand our struggles. I hope that this will continue with future leaders.”

O4, Physician – “Recent change in MTF commander and SGH is resulting in more support for primary care.”

O4, Nurse Practitioner – “The local leadership promotes PCO, but they're unable to give us the manpower that we need.”

## PATIENT RELATIONSHIPS

Negative –

E6, Med Tech – “I do not feel that I can be competitive with other NCOs in the AF for awards. The total person concept doesn’t fit here, too busy in patient care. Senior NCOs in 4N career field seem to be going away. What is there to aspire to?”

O3, Nurse – “Nurse triage is a no win situation. If we give everyone an appointment the doctors get swamped and can’t care for everyone. If we give patients home care, they make formal complaints and the nurses are automatically guilty because the customer is always right. We need support hospital and base wide in order for Nurse Triage to work.”

O3, Nurse – “The community is very irate at the change in medical care under PCO. I get a lot of grief on the phone about it and frankly, I’m tired of it.”

O4, Nurse – “I have been yelled at and heard so many complaints in the last year that I’m beginning to not care.”

O4, Nurse – “The patients were not prepared for PCO before we started the program. They especially do not like nurse triage. They expect to see a doctor when they want to see one.”

O3, Physician – “We have shorter appointments now which means less time to answer questions, to explain, to small talk and to build a rapport. Many of these things happen with the patients and other team members, but it is weakening the doctor-patient relationship.

O4, Physician – “The way PCO has been implemented at my level makes me feel as though I have no choice but to satisfy any and all patient demands no matter how unreasonable they may be at times.”

O4, Physician – “The patients seem unhappy that they are not able to choose their provider as freely as they once did. In pediatrics at this base there are two providers and one is much preferred by the patients.”

E5, Admin tech – “The reduction in the retiree benefit and the nature of my administrative duties makes it impossible for me to feel like I’m helping anyone.”

O3, Nurse – “Most of my time is spent in nurse triage where I am trying to keep patients from coming in to see their provider. This is sometimes confrontational and seldom rewarding. I feel that my time could be better used for disease management and teaching.

O4, Nurse Practitioner – “I try to make the most out of my 15 minutes with patients, and I know that most of them know that I care, however, we do get complaints that patients feel rushed and often can’t get appointments, especially when the entire facility is closed  $\frac{1}{2}$  day for training.”

O4, PA – “With PCO I feel like I am rushed and I don’t have the luxury of talking with my patients in my office.”

O3, Physician – “Time is the issue. We need to have more time to spend with the patients.”

E4, Med Tech – “PCO says that a patient should first use the “Take Care of Yourself” book, then call the HCIL line, then call the clinic where they run into nurse triage. They have to jump through many hoops to be seen by the provider. Many patients are upset by this new system and take it out on us.”

O4, Physician – “PCO forced many of my empanelled families to split up with active duty receiving care at the FSO and the dependents coming here.”

O3, Physician – “PCO has resulted in us having fewer physicians to see the same number of patients. We have less time with each patient in order to meet our access demands.”

O3, Nurse – “I have very little face to face contact with patients. My interactions revolve around trying to screen them for same day appointments. The patient comments I hear most are ‘you have to be dead to get an appointment’.”

O3, Nurse – “Patients make too many demands over the telephone. Or they walk in and demand to be seen right away.”

E3, Admin Tech – “I hear more complaints than appreciation since I’m up front. If the providers are running late they take it out on me.”

O4, Physician – “Less time to spend with patients due to increased volume”

O4, Physician – “Less time with patients, one of the things that I enjoyed about military medicine is gone”

#### Positive –

E5, Med Tech – “It’s a good thing to get to know the patients. They trust us more and are more friendly. It makes work more enjoyable.”

O4, Physician – “The concept of PCO is welcomed by the patients who liked the idea of care given by the entire team.”

O3, Nurse – “I have more direct contact with patients. While I am monitoring the patients with our database I can see the improvement in their health. PCO helps me personalize my job.”

O2, Nurse – “I enjoy my role in patient education. It empowers patients.”

E4, Admin tech – “I know the patients better now.”

E3, Med tech – “I enjoy having more time to spend talking with and listening to my patients.”

O4, Physician – “They know me and my support team by name. I like that.”

## PROFESSIONAL EXPERIENCE

Negative –

E6, Med Tech – “I feel like an airman with a lot of additional duties.”

E6, Med Tech – “We need everyone on duty most of the time. There is limited opportunity for career growth like participating in wing projects.”

O3, Physician – “I used to attend the monthly CME luncheons with the other providers. This is no longer possible...too busy seeing patients.”

O3, Physician – “I mostly see ear infections and viral illness. Most of the sick patients are referred out.”

O3, Nurse – “My nursing skills are slowly turning to mush in this PCO environment. I would not want to be the first wave of casualties in a real shooting war. The skills I need to be an effective nurse in a readiness environment would not be there for the first few weeks!”

O3, Nurse – “I spend the majority of my time working clerical issues: booking appointments, reviewing PHA charts, etc. I have no time to run a nurse managed clinic.

O4, Nurse – “Prior to PCO I worked a lot of overtime and did not mind. I was using my nursing skills to good purpose. Now with PCO I do not do much that requires my registered nursing skills. If management wants me to be an appointment clerk, admin clerk, data entry person as a priority, I see no reason to use overtime to get nursing issues taken care of.”

GS9, Nurse – “I act as the group practice manager. I spend most of my time on the phone or accomplishing administrative jobs. Unfortunately I am not able to do much to help the providers care for their patients.”

O3, Physician – “The focus is so much on access and seeing more patients with fewer providers that I dread seeing a complicated patient. I will more likely refer them out to the network even though, with sufficient time, I could manage the patient. Several providers here in the clinic have stopped doing procedures because they take so much time and decrease the volume of patients that we could see. These patients are also referred out to the network.”

O4, Physician – “My ability to participate in necessary committees and educational opportunities has been greatly reduced due to patient care demands and to meet the needs of my patients.”

E5, Admin tech – I am back to being a record tech, what I did as an airman. Under PCO I may spend the last 6 years of my career as a medical record tech with no opportunity for career broadening.”

O3, Nurse Practitioner – “I do not have time to consult with specialists face-to-face or with telephone calls. Written consultations are returned with poor documentation...minimal learning for me.”

O4, Physician – “Limited resources prevent me from providing women with birth control options such as IUD and diaphragms. It is a waste of money to refer these patients out, plus I do not maintain my clinical skills.

O4, Physician – “No time to meet and talk with civilian consultants.”

O1, PA – “It would be nice to have a surgeon, internist, ortho and ENT to consult with in the facility.”

O3, Nurse – “I can’t get time off to obtain CEUs.”

O4, Physician – “I take care of patients between 18 and 50 years old. I would like to see all ages.”

O4, Physician – “We have very limited funds for medical CME. Bad for morale, bad for quality of patient care.”

E4, Med tech – “We’re expected to do military things but not allotted the time to do them because of PCO.”

O3 Nurse – “Phone triage is not the type of challenge I find rewarding in nursing.”

O3, Physician – “Scope of practice a real concern. I’m not doing colposcopy, flexible sigmoidoscopy and other procedures at the clinic. I feel that my skills will atrophy.”

GS9, Nurse – “I spend 90-99% of my time on the telephone with patients and filling out healthwise reports. I miss the patient interaction that I used to have.”

O3, Physician – “Overarching concern for numbers cuts into time to learn more and develop professionally. Not possible to teach.”

O4, Physician – “Unable to care for pediatrics and elderly, losing my skills in these areas.”

E6, Med tech – “I am very disappointed that a MSgt job description differs very little from that of an airman.”

O4, Physician – “Scope of practice and CME interferes with our ability to meet SG expectations – They are in direct conflict with the 25/day, 21 days/month metric.”

O4, Physician – “There is a disincentive to perform procedures due to the push to see 25 patients per day.”

**Positive –**

O3, Nurse – “Although my workload is high, the job is rewarding and satisfying. I feel like I use all of the skills and knowledge that I learned in nursing school.”

O4, NP – “I have excellent support from other NPs and physicians.”

## QUALITY OF MEDICAL CARE

Negative –

E7, Med tech – “Too much emphasis on numbers, not enough on the quality of care.”

Contractor, HCI – “Population health depends on data we don’t have because we never received PHCA and had to develop our own database. The time it will take to populate this database with 11,000 patients is staggering. And, the manpower to populate the database comes from an already overworked team. The data supplied by the population health support division is so retrospective it is virtually meaningless. I really believe that patients were better served when individual providers oversaw specialized areas such as women’s health for the whole clinic.”

E6, Med tech – “I don’t have enough time to talk to the patients and care for them the way I would like to.”

O4, Nurse – “Our providers are all very young. We need an experienced family practice physician who could answer their questions and give them advice when they come across a patient that they do not know how to care for. We refer way to many of these patients out to the network.”

GS6, Admin tech – “No one is providing statistics on population health. No time to prepare the statistics.”

E5 Med tech – “Patients complain they do not spend enough time with their providers. They are being rushed too much.”

O3, Nurse – “Nurse managed clinics without proper training is my concern. The nurses here manage a cold clinic where we diagnose and treat patients. I have not been trained to accomplish this task, it is beyond my scope of practice.”

O3, Nurse Practitioner – “Not enough time for complicated cases. One case (abdominal pain, diabetes, polypharmacy) can get me behind for the entire day.

O4, Physician – “I have never seen any population health information for my pediatric population.”

GS5, Med Tech – “Patients that truly need care can’t get it.”

O4, PA – “The population health data is not accurate. People do not fill in the HEARs survey. Systems do not talk to each other (ADS, CHCS).”

O3, Physician – “I think quality of care is suffering because we as providers are getting burned out.”

O3, Nurse – “I feel like patients are rushed through. Little time available for quality patient education.”

O3, Physician – “Concerned about decrease in appointment time after PCO. I have much less time to deal with my patients. This will be an even bigger issue if more of my patients are over 65.”

O5, Physician – “PCO cannot function without primary care manager by name. Our appointments are scheduled by the contractor. Patients are mixed across all providers. Only 10-15% of a provider’s scheduled patients belong to his panel. There is a definite lack of continuity of care.”

E3, Admin Tech – “There is never enough time to handle things like PHAs without falling behind in something else like paperwork or KG-ADS.”

Positive –

O5, NP – “The overall medical care is improved when a patient is empaneled to one provider and is consistently seen by the same provider. The PCM concept has helped tremendously with this.”

E4, Med tech – “I think everyone is getting better care by seeing the same doctor all of the time.”

O3, Nurse – “The best thing about PCO is the commitment of providers to see their panel, walk in, if needed.”

O4, Physician – “Continuity of care – seeing the same doc has definitely improved with PCO. But, the time available to spend on each patient has decreased with an increase in the administrative workload (CHCS, ADS, etc.)”

## TREATMENT TEAM

### Negative -

E5, Med Tech – “Good team work within teams, but poor teamwork between teams. PCO has divided our staff.”

O3, Physician – “Our team is always being dismembered for other duties and for training. Seldom do we have a full team.”

E3, Med tech – “We do not have enough techs to support PCO.”

O3, Physician – “We never have two techs per provider, many days we do not have one tech per provider.”

Contractor, Physician – “We don’t have enough tech support, especially because of the large number of pelvic exams we do. PCO needs to take into account the number of pelvic exams when evaluating the required support staff.”

O4, NP – “We do not have the manpower as defined by PCO. We have one RN who does mostly administration. We have no nurse educator, no procedure room, medical records are available ~25% of the time.”

O3, Nurse – “Teamwork?! What a joke. In fact the docs find it easier to do everything themselves instead of trying to find one of the support staff. We don’t have the manning for PCO.”

O3, Physician – “Only one nurse to support two providers. When she is gone we are bombarded with telephone consults and paperwork. We could use another nurse.”

O5, NP – “About half of the time we do not have the entire support staff, but we have higher productivity expectations anyway. This makes everyone frustrated and stressed.”

Contractor, HCI – “The problem here is a lack of adequate staffing to accomplish all that is expected, not a lack of desire to do a good job. Team members are frequently pulled for non-medical duty. In addition to the normal day-to-day patient load, team members are expected to populate a local patient database created to monitor population health. This is very time consuming.”

E4, Med tech – “The other med tech on the team is the NCOIC for the clinic. He only spends 15% of his time supporting the provider. I do the rest of the work.”

O3, Nurse – “PCO is a good concept, but the number of personnel needed to support the providers was underestimated, especially the administrative support. We should have two admin techs per provider!”

O4, Nurse – “The providers will frequently report late for work, which delays all of the patients and makes them cranky. There is no apparent management response for this behavior.”

O3, Physician – “We have excellent tech and nursing support – the major roadblock for us is having each person present and free to do his/her job. Over the last month, we have had a full team approximately 6 days. Each day my 4A is tasked to be doing duties away from the team for 4 to 8 hours.”

GS6, Admin Tech – “The team works well together, however, manning restrictions, training, and additional duties put a hinderence on our efficiency.

GS9, Nurse – “Our team works well when we are all here. Unfortunately, we are seldom all here and we never get a backfill.”

E4, Med tech – “Teamwork is not very good between teams.”

E5, Med tech – “Before PCO, everyone in the clinic worked very well together. Now the attitude is, ‘It’s not my team/provider’. There is a definite lack of teamwork in the clinic.

E5, Admin tech – “4As are doing literally more with less, 4Ns on the other hand, have less to do now than before. 4Ns need to be more willing to assist the admin techs.”

O3, Nurse – “We have developed good tight teams, but it is hard for these small teams to see the big picture. As a nurse manager I spend a lot of time explaining to providers why their staff are being used for other activities.”

E5, Admin tech – “We had better teamwork under the old system. Now we are fighting with other about who should do what.”

O4, Nurse Practitioner – “We are PCO on paper only. I do not have one designated technician assigned to me. We have 4 4a’s on paper, yet only 2 of them are routinely in the clinic. I still do all my own ADS coding and other data entry that keeps me from seeing additional patients.”

E3, Med tech – “Teamwork? Our support for each other lacks greatly due to egos and selfishness.”

GS13, GPM – “PCO has put a stress on treatment teams. It has been difficult to implement a major cultural shift while still caring for a large number of patients. The additional manpower resources were slow to arrive at the clinic.”

O3, Physician – “We are optimized in name only. One of my med techs is the NCOIC of the clinic. She does minimal patient care. My nurse is also the clinic manager and is on half days for her pregnancy. So, I have one medical technician who works with me, just like before PCO.”

O4, Physician – “The team lacks enthusiasm and has a limited understanding of medicine.”

O4, Physician – “Constantly undermanned. I hear lots of plans however never given the staffing to carry out the plans. Morale is plummeting!”

O4, GPM – “There is a morale problem in the MTF that has been caused by breaking out some primary care teams and giving them extra manpower. In many cases this extra manpower came from other treatment teams. This has caused an “us verses them” atmosphere.”

E6, Med tech – “We are currently working with 3 medical techs per provider. When we are taken down to two, PCO will take a big hit. We will not be able to accomplish everything that is now expected of us. Someone, somewhere needs to see this.”

O3, HCI – “The teamwork is excellent on the treatment teams that are optimized but the remainder of the PCMs are frustrated because of a lack of support staff.”

O3, Nurse – “Some of the providers could help by calling the patients themselves. Sometimes I feel like an appointment clerk or a secretary.”

O4, Nurse Practitioner – “The technicians we have are wonderful but we do not have enough to be fully optimized AND they are continually tasked with military and other duties.”

E4, Med Tech – “The 4As are understaffed on the team. We cover the appointment desk and the front desk at lunch. We help file medical records.”

O3, Nurse – “Not enough manpower in admin to support the teams. Nurses are pulled for triage duty and medical in-processing, meetings, paperwork, etc. I can’t spend time with the team. Techs are pulled for details and ambulance call and are not available.”

O4, Physician – “Modest gains. 4A support still a big problem. Rarely have 2-4 Ns at any given time (leave, details, bay orderly, ALS, etc)

O4, Physician – “Our facility has been unable to provide dedicated administrative techs to each PCM full time”

O2, Nurse – “Although we work as a ‘team’ we are not in each other’s chain of command. We have no control over schedules and taskings.”

Positive –

O4, Physician – “Shortly after the initiation of PCO I lost my partner. I needed to care for all of our enrolled patients on my own. I couldn’t have done this without the nurses performing telephone triage and taking care of the telephone consults and the medical techs taking care of the wart clinic and throat cultures. Two teams of support staff allowed me to increase my productivity even more than the AF guidelines. Maybe the AF should consider increasing the support staff even more for larger gains in productivity.”

E6, Med tech – “PCO is the way to go. Our jobs are more meaningful, we are learning and doing more. PCO created cohesive, dynamic teams. We are doing more for our patients and they appreciate the PCO initiatives.”

E6, Med Tech – “Our teams are very happy and proud of our accomplishments. It is a joy to come to work every day!”

O5, NP – “When all of my staff is here I am very pleased with the quality of our work and we truly work as a team.”

E3, Admin tech – “My team is very good at helping out when I get behind.”

E6, Med tech – “I love my team mates. I have never been happier working with such an awesome group of people. Best move I’ve ever made.”

O3, Nurse – “Our team works extremely well together to maintain the PCO concept.”

E4, Med Tech – “Team work is better within the PCO team because we work with the same people, we know each others likes and dislikes. We have to work well as a team so that we spend only 9 hours at work instead of 10.”

O3, Nurse – “Our group works very well together, especially the nurses, providers, and PAs.”

O4, PA – “The great personnel on our treatment team make PCO work. We have great people, just not enough of them.”

O3, Nurse – “Our team works well together. Support from other teams is definitely lacking.”

O4, Physician – “Identifying specific technicians to work with me on a daily basis has been a significant improvement and probably one of the biggest positives coming from PHO.”

O3, Physician – “I enjoy working with my own techs. Familiarity with routines improves efficiency.”

O3, Physician – “We gained several highly motivated troops with a good attitude.”

E3, Admin Tech – “I think everyone on my team is great. They know that we don’t have many people at this exact time so they help me out whenever they can. They make things as easy and organized as possible.”

O4, Physician – “Very happy with my technician”

## WORKLOAD

### Negative –

E6, Med tech – “Manning levels do not allow for management/administration or readiness or additional duties. It is very difficult to feel like I’m doing a good job when I feel like I’m racing from task to task while trying to fit patient care in as well.”

O3, Nurse – “My workload is very high – it gets exhausting and mentally draining. This has made me reconsider my career choices, whether I should remain in the military...”

E5, Med tech – “I feel like I’m working 50% harder for a 20% increase in productivity.”

O3, Physician – “Everyone in the clinic leaves at 1600 except the providers. We’re here until 18-1900 every night.”

Contractor, Physician – “I used to attend teaching rounds and CME conferences over my lunch hour. It is very hard to go to any CME conferences with my current workload. I almost always work through lunch.”

E5, Med tech – “With the extra duties expected of us we work much longer hours than med techs that are not assigned to PCO teams.”

O3, Physician – “To complete all of my work I frequently need to come back to work after hours. The work intensity is greatly increased despite the added support.”

Med Tech – “Technicians are tasked to do more and more and more. If you were to break down the different number of additional duties the medical technician does most of them. I’m working 60 hours a week, up from 40 hours a week before PCO. I don’t have enough time!”

O5, GPM – “All of the teams are working very hard – harder than I have ever seen in an outpatient clinic. They are providing good care and a large amount of it, but they are getting tired. This is not a condition that can continue indefinitely. I predict a massive exodus from the military unless they get relief.”

O5, GPM – “I am the GPM in name only. I also wear four other hats including the squadron commander hat. I cannot give the GPM job the attention that it deserves.”

E3, Admin tech – “Not enough time to complete everything. The only way to get anything done is to come in on weekends when the phone isn’t ringing and patients aren’t in house.”

E4, Admin tech – “There is way too much administrative work to do in a team than what can be accomplished by one technician. I do all that I can, and my team helps me, but I still fall behind. I’m tired of staying late every night and my morale is the pits. I have no life! There is enough administrative work to keep two techs busy full-time.”

E4, Med tech – “When I am putting in strenuous hours during on duty time, the last thing I want to do is to come in in the evenings or on weekends to break down records and file paperwork, etc.”

E6, Med tech – “Never enough time to train or to finish daily tasks.”

GS6, Admin tech – “My work load has definitely increased. I am so stressed that I am concerned about the quality of my work. Coding is now being accomplished by the admin techs, but we have not been trained to perform this function. I feel that the codes are not as accurate as they were before. I was working 45-50 hours per week in order to keep up with the workload. I did this without comp time or over time. I’m not doing it any more. I won’t take work home with me and I won’t work more than 42-43 hours per week. The backlog is building and will continue to build.”

E5, Med tech – “I frequently come in early and stay late in order to keep up with the incredible pressure to stay on top of the workload.”

GS9, Nurse – “More work is given to the team every week. Always rushing – I feel as if I am not giving patients the quality care they deserve.”

O3, Physician – “I am too busy taking care of patients to accomplish other important tasks. I can’t lead my team, attend meetings, accomplish military training, or prepare for inspections because of the press of patient care.”

O3, Physician – “My dissatisfaction deals with our decreased number of providers to care for the same enrolled population. We have cut providers from 11 to 5, which has increased our call and the demands on our time. We are more efficient because of PCO, but only 30-40% more efficient. The rest comes out of hide. We work longer hours including lunch hour, evenings and weekends.”

E4, Med tech – “I’m working more hours. The patient load is the same, but we have many more administrative duties.”

E5, Med tech – “With the extra hours that I spend at work, I feel that my babysitter sees my children more than I do. We need to shorten the hours, get more help!”

O4, Physician – “While PCO means taking care of our patients, there is a limit to the amount of work that any single provider or clinic can do. We are expected to walk in any and all patients who demand to be seen, even if, in our judgment, the complaint is not critical/emergent. I am frequently here late into the evening to complete my paperwork.”

E5, Admin tech – “My workload has tripled since the advent of PCO. We must be full-time outpatient records techs, full-time family practice admin support, and we have supervisory tasks, EPRs, feedback, discipline, etc.”

O3, Nurse Practitioner – “Providers see patients from the 1<sup>st</sup> minute until the last minute of the duty day, but must use lunch and evenings to return telephone calls, notify patients of lab results, etc. Non-physician providers are given less administration time than physicians.”

O3, Nurse – “Not a very satisfying job. High tech nurse computer like a ball and chain. You just can’t get away from it.”

O3, Nurse – “The workload is much higher because of the demands of the patients. We do not place enough responsibility on the patients for their care.”

E5, Med tech – “We were given a larger wagon to move more crops, but no horses to pull the wagon.”

O2, PA – “Increased workload, shorter appointments, and additional tasks for the providers to accomplish. We are being worked way too hard.”

O3, Physician – “The workload has increased dramatically. Not enough hours in the day to do everything. Twelve to thirteen hour days are the norm.”

O4, Nurse practitioner – “My personal life and health are suffering from never ending stressors.”

GS6, Med Tech – “We are expected to do much more with the same amount of staff.”

O3, Physician – “PCO here equates to increased work load with same support staff, exam rooms, and resources. We are under increasing pressure to meet 25 patient per day metric.”

O3, Physician – “PCO formula – asked to see more patients with less staff. Has resulted in extreme frustration and much longer hours.”

E2, Med Tech – “The med techs and doctors always have to stay over lunch and late in the evening to keep up. We put in 60-hour weeks. I’m not sure that we have the right manning to provide good medical care for the enrolled population.”

E5, Med Tech – “Two med techs is not enough to take care of patients and to train for wartime readiness. What is our real mission?”

E6, Med tech – “For several months I was coming in early and leaving late at night, just to get my work done. This was with three medical techs per provider. I can no longer do this at the expense of my family.”

O2, Nurse – “We are ‘overstaffed’ but we are so busy that I can’t even get leave.”

O3, Nurse – “We spend countless hours pulling records. Admin techs are supposed to be assigned to the teams, but they are actually stuck in the records section. We have to take care of phone calls, faxing, etc for the providers.”

O3, Nurse – “I spend less time with patients and more time on administrative and secretarial duties. Not much fun!”

O3, Physician – “I am very dissatisfied with our workload. Trying to see 25 patients per day 5 days per week plus all of our administrative duties, telephone consults, chart reviews, etc equals poor quality of life, early burnout, and a strong desire to leave the military.”

O4, Physician – “We are all being asked to do too much in too little time. As a physician, I expect to work more than 8 hour days, but when I have to work 12 to 14 hour days to see 20-25 patients plus do all the other AFMS programs (administrative duties, PHA, chart reviews for 3 providers, committees, and disease management) it is not sustainable.”

E3, Admin Tech – “It seems like I’m always leaving work behind that I can’t complete during the day. It’s too much to handle. I feel a big burden on my back.”

E4 Med Tech – “With PCO seems like 4NOs are the dumping ground for all tasks, PHAs, occupational exams, administration, all done by us now. Not enough hours in the day to accomplish all of the tasks.

E4, Med Tech – “Seems like we’re working more hours and harder for less effectiveness.”

E4, Admin tech – “There is way too much for one admin tech to do. I get very discouraged because I can’t catch up.”

O3, Nurse – “Too busy to even stop long enough to think through new ideas and processes. Forget about patient education because I’m just trying to get on/off the phone as quickly as possible to move on to the next call.”

E5, Med Tech – “We still pull 12 hour ambulance call shifts and do not always get to work with our assigned PCO team.”

O3, HCI – “I need to assess patients, educate patients, train technicians, but I can’t do any of that because I’m tied to the telephone all day doing nurse triage.”

O4, Physician – “About the time we started PCO, KG-ADS was implemented. This system dramatically increased our administrative burden and negated any workload gain from PCO.”

O4, Nurse Practitioner – “I am a flight commander and a PCM. The duties and responsibilities are endless. I have 2 full-time jobs, but feel that I don’t do either of them very well. The flight commander job is important for promotion, but my PCM job takes up most of my duty hours. I spend many evenings accomplishing my ‘additional duty’. The HIS/JCAHO is very time consuming.”

E4, Admin Tech – “I’m not satisfied with the hours that I work. The amount of work is fine, but the majority of my work comes in at the end of the day and I have to stay late to complete it.”

E3, Admin Tech – “Admin section is very low manned. We do not have the time to maintain a records room and interact with the PCO team. We need more people.”

E4, Medical Tech – “I now spend more time doing my extra duties after hours. This means an increase in day care for me, but no extra pay.”

E5, Medical Technician – “Although we are encouraged to be more involved with our patients we are not afforded the luxury of enough time to be able to do this well and accomplish our daily tasks. We come in and hit the ground running and do not slow down all day. It is not a healthy environment.”

O3, Nurse – “Working 10-12 hours a day to complete my work.”

O4, Physician – “25 visits per day plus OPRs, plus ADS, plus PRP, plus telephone consults, etc, etc, ad nausea spill into the evening and lunch time. I am tired of 13 hour days and 5 minute “lunch hours”

O4, Physician – “Working far more intensely due to artificial # of 25/day coupled with the mandate to see all our own walk-ins daily and at the same time we cover the Acute Care Clinic walk-ins in the morning. This has all but eliminated the chance of exercising over lunch hour and our doing procedures.”

Positive –

O3, Nurse – Our previous environment providers worked a strict 0730-1630 schedule. It was a major act to get them to work outside their duty schedules. Now they feel the pressure to get numbers so they work long hours without lunches. They see patients before/after their duty shift. They love it!

## **Appendix P**

**SPSS Output – The Effect of Medical Technician, Administrative Technician and  
Nurse Support on Overall Satisfaction with the Treatment Team**

UNIANOVA  
 tx\_team BY med\_tech  
 /METHOD = SSTYPE(3)  
 /INTERCEPT = INCLUDE  
 /PRINT = DESCRIPTIVE  
 /CRITERIA = ALPHA(.05)  
 /DESIGN = med\_tech .

## Univariate Analysis of Variance

### Between-Subjects Factors

		N
2 MTs per Provider?	0	464
	1	830

### Descriptive Statistics

Dependent Variable: Overall Sat Tx Team

2 MTs per Provider?	Mean	Std. Deviation	N
0	4.31444	1.35469	464
1	4.80157	1.37388	830
Total	4.62689	1.38634	1294

>.49 diff

### Tests of Between-Subjects Effects

Dependent Variable: Overall Sat Tx Team

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	70.623 <sup>a</sup>	1	70.623	37.791	.000
Intercept	24732.669	1	24732.669	13234.675	.000
MED_TECH	70.623	1	70.623	37.791	.000
Error	2414.461	1292	1.869		
Total	30187.220	1294			
Corrected Total	2485.084	1293			

a. R Squared = .028 (Adjusted R Squared = .028)

## UNIANOVA

tx\_team BY adm\_tech  
 /METHOD = SSTYPE(3)  
 /INTERCEPT = INCLUDE  
 /PRINT = DESCRIPTIVE  
 /CRITERIA = ALPHA(.05)  
 /DESIGN = adm\_tech .

## Univariate Analysis of Variance

### Between-Subjects Factors

		N
1 AT per Provider?	0	662
	1	631

### Descriptive Statistics

Dependent Variable: Overall Sat Tx Team

1 AT per Provider?	Mean	Std. Deviation	N
0	4.43671	1.36140	662
1	4.82916	1.39144	631
Total	4.62823	1.38953	1293

>.39 diff

### Tests of Between-Subjects Effects

Dependent Variable: Overall Sat Tx Team

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	49.758 <sup>a</sup>	1	49.758	26.275	.000
Intercept	27737.093	1	27737.093	14646.589	.000
ADM_TECH	49.758	1	49.758	26.275	.000
Error	2444.841	1291	1.894		
Total	30191.310	1293			
Corrected Total	2494.600	1292			

a. R Squared = .020 (Adjusted R Squared = .019)

### UNIANOVA

```
tx team BY nurse
/METHOD = SSTYPE(3)
/INTERCEPT = INCLUDE
/PRINT = DESCRIPTIVE
/CRITERIA = ALPHA(.05)
/DESIGN = nurse .
```

## Univariate Analysis of Variance

### Between-Subjects Factors

	N
1/2 Nurse per Provider? 0	298
1	990

### Descriptive Statistics

Dependent Variable: Overall Sat Tx Team

1/2 Nurse per Provider?	Mean	Std. Deviation	N
0	4.14564	1.42458	298
1	4.78793	1.33261	990
Total	4.63932	1.38073	1288

>.64 diff

### Tests of Between-Subjects Effects

Dependent Variable: Overall Sat Tx Team

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	94.493 <sup>a</sup>	1	94.493	51.512	.000
Intercept	18280.387	1	18280.387	9965.283	.000
NURSE	94.493	1	94.493	51.512	.000
Error	2359.048	1286	1.834		
Total	30175.593	1288			
Corrected Total	2453.541	1287			

a. R Squared = .039 (Adjusted R Squared = .038)

### UNIANOVA

```
tx_team BY nurse med_tech adm_tech
/METHOD = SSTYPE(3)
/INTERCEPT = INCLUDE
/PRINT = DESCRIPTIVE
/CRITERIA = ALPHA(.05)
/DESIGN = nurse med_tech adm_tech nurse*med_tech nurse*adm_tech med_tech
*adm_tech nurse*med_tech*adm_tech .
```

### Univariate Analysis of Variance

#### Between-Subjects Factors

		N
1/2 Nurse per Provider?	0	294
1/2 Nurse per Provider?	1	974
2 MTs per Provider?	0	452
2 MTs per Provider?	1	816
1 AT per Provider?	0	645
1 AT per Provider?	1	623

### Descriptive Statistics

Dependent Variable: Overall Sat Tx Team

1/2 Nurse per Provider?	2 MTs per Provider?	1 AT per Provider?	Mean	Std. Deviation	N
				1.51242	172
	1		4.60556	.79073	18
	Total		4.05368	1.46896	190
1	0		4.31039	1.31885	77
	1		4.30741	1.38006	27
	Total		4.30962	1.32822	104
	Total	0	4.09317	1.45995	249
		1	4.42667	1.17848	45
		Total	4.14422	1.42377	294
1	0		4.45419	1.15861	179
	1		4.64337	1.38301	83
	Total		4.51412	1.23459	262
1	0		4.85253	1.27465	217
	1		4.91071	1.39785	495
	Total		4.89298	1.36086	712
	Total	0	4.67247	1.23806	396
		1	4.87232	1.39769	578
		Total	4.79107	1.33805	974
Total	0		4.22963	1.36121	351
	1		4.63663	1.29420	101
	Total		4.32058	1.35578	452
1	0		4.71054	1.30611	294
	1		4.87950	1.40202	522
	Total		4.81863	1.36984	816
	Total	0	4.44884	1.35669	645
		1	4.84013	1.38701	623
		Total	4.64109	1.38502	1268

### Tests of Between-Subjects Effects

Dependent Variable: Overall Sat Tx Team

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	134.980 <sup>a</sup>	7	19.283	10.584	.000
Intercept	9596.071	1	9596.071	5267.308	.000
NURSE	19.863	1	19.863	10.903	.001
MED_TECH	3.429	1	3.429	1.882	.170
ADM_TECH	5.376	1	5.376	2.951	.086
NURSE * MED_TECH	3.108	1	3.108	1.706	.192
NURSE * ADM_TECH	.952	1	.952	.522	.470
MED_TECH *					
ADM_TECH	4.076	1	4.076	2.237	.135
NURSE * MED_TECH *					
ADM_TECH	1.710	1	1.710	.938	.333
Error	2295.489	1260	1.822		
Total	29742.810	1268			
Corrected Total	2430.469	1267			

a. R Squared = .056 (Adjusted R Squared = .050)

## **Appendix Q**

**SPSS Output – The Effect of Medical Technician, Administrative Technician and  
Nurse Support on Overall Physician Satisfaction with the Treatment Team**

**UNIANOVA**

```

tx_team BY nurse med_tech adm_tech
/METHOD = SSTYPE(3)
/INTERCEPT = INCLUDE
/PRINT = DESCRIPTIVE
/CRITERIA = ALPHA(.05)
/DESIGN = nurse med_tech adm_tech nurse*med_tech nurse*adm_tech med_tech
*adm_tech nurse*med_tech*adm_tech .

```

**Univariate Analysis of Variance****Between-Subjects Factors**

		N
1/2 Nurse per Provider?	0	80
	1	199
2 MTs per Provider?	0	128
	1	151
1 AT per Provider?	0	154
	1	125

**Descriptive Statistics**

Dependent Variable: Overall Sat Tx Team

1/2 Nurse per Provider?	2 MTs per Provider?	1 AT per Provider?	Mean	Std. Deviation	N
0	0	0	3.6585	1.23284	1
	1	0	4.68000	.54037	5
		Total	3.64746	1.22859	59
1	0	0	4.33750	.91424	16
	1	0	4.16000	1.24419	5
		Total	4.29524	.97081	21
	Total	0	3.73143	1.20813	70
		1	4.42000	.94493	10
		Total	3.81750	1.19543	80
1	0	0	3.98511	1.03587	47
	1	0	4.17727	.96999	22
		Total	4.04638	1.01222	69
	1	0	4.58108	1.14160	37
		1	4.91183	1.04776	93
		Total	4.81769	1.08123	130
	Total	0	4.24762	1.11738	84
		1	4.77130	1.06933	115
		Total	4.55025	1.11758	199
Total	0	0	3.75347	1.16031	101
	1	0	4.27037	.91895	27
		Total	3.86250	1.13040	128
	1	0	4.50755	1.07522	53
		1	4.87347	1.06428	98
		Total	4.74503	1.07887	151
	Total	0	4.01299	1.18408	154
		1	4.74320	1.06076	125
		Total	4.34014	1.18569	279

,74

,88

,73

### Tests of Between-Subjects Effects

Dependent Variable: Overall Sat Tx Team

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	73.346 <sup>a</sup>	7	10.478	8.944	.000
Intercept	2019.204	1	2019.204	1723.564	.000
NURSE	1.464	1	1.464	1.250	.265
MED_TECH	4.351	1	4.351	3.714	.055
ADM_TECH	3.708	1	3.708	3.165	.076
NURSE * MED_TECH	1.937	1	1.937	1.653	.200
NURSE * ADM_TECH	.312	1	.312	.267	.606
MED_TECH * ADM_TECH	2.326	1	2.326	1.986	.160
NURSE * MED_TECH * ADM_TECH	3.562	1	3.562	3.041	.082
Error	317.484	271	1.172		
Total	5646.310	279			
Corrected Total	390.830	278			

a. R Squared = .188 (Adjusted R Squared = .167)